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SCHOOL LIFE

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OFFICE OF EDUCATION

In this issue

Art Education and the National Gallery
JOHN WALKER

Teaching About Human Rights
WILHELMINA HILL AND HOWARD C. CUMMINGS

NOVEMBER–DECEMBER 1962

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THE ART OF LIVING

Now just after we Americans have observed a special week for the benefit of the National Cultural Center, it is fitting that we remind ourselves also of every man's need to be an artist.

MAN EXISTS to do creatively, in the most craftsmanlike manner possible, all things that must be done: great things like government, or mothering, or the healing of minds and bodies; small things like making beds, or hoeing corn, or driving a truck; things in the public eye like making speeches, or unleashing atomic energy, or making peace; obscure things like selling groceries, or running a bus, or teaching school. . . . There are a vast number of tasks to be performed in this world, most of them not romantic. They may be done in one of two ways: just to get them over with as quickly and as painlessly as possible, in which case they become a monotonous burden hard to bear; or each as beautifully and thoroughly as possible, in which case life is good to the taste.

Our fathers knew the joy that lies in craftsmanship. . . . We have forgotten it, overlooked it. . . . That is why we are restless, unreliable, combative, caught in a web of doubt and dismay. No salmagundi made of things, amusements, lust for power can assuage the gnawing hunger to create. There will be no recovery of serenity, no mutual patience sufficient for fraternity, until we learn ourselves and teach our boys and girls that unless human beings become creative artists they remain petulant children, dangerous, predatory.

Our fathers also knew, but few of their progeny seem aware of it, that every man is made—and this is the highest art of all—to give to other men understanding, tolerance, clemency, not with design to get from those others any *quid pro quo,* not even to get from them understanding or clemency or tolerance, but just because this is the kind of thing that man can do and must, most humbly. Man was made to be a lover—not necessarily beloved but a lover. To be artist and lover, that is the destined end of man.—BERNARD IDDINGS BELL, in *Crisis in Education,* reprinted with permission from McGraw-Hill Book Co.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • ANTHONY J. CELEBREZZE, *Secretary*
OFFICE OF EDUCATION . . . FRANCIS KEPPEL, *Commissioner*
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Francis Keppel

United States Commissioner of Education

ON NOVEMBER 24 President Kennedy announced the appointment of Francis Keppel as 16th United States Commissioner of Education.

Mr. Keppel comes to his new post from Harvard University, where since 1948 he has been dean of the Graduate School of Education. Under his leadership the Graduate School has become a center for young students seeking the knowledge and skills needed for careers in education and for experienced teachers and administrators doing advanced study and research. To a large extent the development and expansion of the School tells the story of Mr. Keppel's career over the past 14 years. Since he became dean, full-time enrollment has increased more than four times; applications for admission, ten times; the faculty, four times; and the endowment, at least twice. The School now enrolls 670 students—80 percent of them full-time in contrast to 39 percent in 1948—and has a faculty of 83 and an endowment of $6.2 million. Applications for admission have increased from fewer than 200 in 1948 to nearly 2,000.

Before becoming dean, Mr. Keppel was assistant to the provost of the University. During World War II he was secretary to the joint Army and Navy committee on welfare and recreation and served in the Army's Information and Education Division.

On both the national and the international scene Mr. Keppel has had a distinguished career as consultant and adviser on education. In 1957 he represented the United States at the International Conference on Public Education at Geneva, Switzerland; in 1960 he served on an educational commission for the Nigerian government and also on President Kennedy's task force on education; and last spring he was chairman of the committee of consultants on the selection of a superintendent of schools for New York City. He was a member of the panel on educational research and development for the President's Science Advisory Committee. On more than one occasion he has been an adviser to the Office of Education; for example, after the National Defense Education Act was passed, he participated in a conference on the educational uses of television and served on a committee for programs to improve instruction in modern foreign languages, and this year he was one of a committee of three for revising the review procedures of the Cooperative Research Program.

Mr. Keppel was born in New York City, April 16, 1916. He is the son of the late Frederick P. Keppel, once the dean of Columbia College and later the president of the Carnegie Corporation. He received his A.B. degree from Harvard in 1938 and studied sculpture for a year at the American Academy in Rome.

The new commissioner takes office at noon on December 10. His nomination will go to the Senate in January for confirmation. He succeeds Sterling M. McMurrin, who resigned in September.

Notes on the Notable

FEDERAL PROGRAMS AND ACTIVITIES

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School-college cooperation strengthens the STEPS program

An Office of Education program for the improvement of science and mathematics teaching in the public schools (STEPS, from *Science Teaching—Exploring for Excellence: Program Steps*) is enjoying an interesting development.

When the program first began, in the spring of 1960, each participating State designated one or two schools to be the hub of a STEPS project; and although the project reached out to surrounding schools and covered perhaps several counties, it was still an isolated unit and had little influence beyond that area. Now, however, States are coming into the program—for instance, Indiana, Ohio, Michigan, and Maine—with a plan that is likely to extend STEPS into almost every one of their schools.

These States are dividing themselves into regions, each with a college or university that has agreed to work with the State department of education and be the generating center for that region. The State-department-school-college tie is strengthening STEPS in at least two ways: It is involving schools in every part of the State, and the participating schools are getting the additional advantage of working in close relationship with an institution of higher education associated with the State department of education.

OE fall survey extends its reach

This year the Office of Education's fall survey of the Nation's public schools is picking up more information than usual. The usual is State-by-State totals on about 10 basic items—pupils, teachers, teachers with less than standard credentials, pupils in excess of normal school-plant capacity, pupils on curtailed sessions, classrooms completed and classrooms abandoned in the previous school year, classrooms currently available and classrooms needed, and classrooms scheduled for completion in the current year.

The greater reach of this fall's survey will bring in—

1. The number of pupils by grade (formerly the only breakdown was by elementary or secondary school level)
2. The number of high school graduates in 1961–62 and, to fill the gap since the latest biennial survey, the number in 1960–61.
3. The number of local school districts.

In addition to State totals on all these items, the survey will bring in the same information for each of the 15 largest cities in the country.

It will also bring in the number of pupils enrolled in the elementary schools, from kindergarten through grade 8, in each of the 53 largest standard metropolitan statistical areas, which comprise some 160 counties in 30 States. This addition to the usual scope of the survey has been made as a service to the Census Bureau, which needs the information for its work of making population estimates.

Cities get Federal help for combating delinquency

Fourteen cities and Lane County, Oregon, have received "demonstration grants" from the Federal Government under the Juvenile Delinquency and Youth Offenses Control Act (P.L. 87–274) and are proceeding to demonstrate what a community can do when it enlists its every resource in an effort to wipe out juvenile delinquency. The cities are Boston, Charleston, W. Va., Chicago, Cleveland, Detroit, Houston, Los Angeles, New Haven, Philadelphia, Minneapolis, New York City, St. Louis, Syracuse, and Washington, D.C. All but New York have one program and are still in the planning stage. One of New York's two programs, the one on the lower east side, called Mobilization for Youth, has entered the action stage, thanks to a head start gained in December 1959, when the National Institute for Mental Health gave it a grant; its second program, in Harlem, is in the planning stage.

The Federal Government also provides these cities—and any others that request it—with an advisory service. It is available from the Youth Development Unit in the Children's Bureau, U.S. Department of Health, Education, and Welfare, which has a staff of consultants under the direction of Shelton B. Granger. These consultants in turn have access to advisory services and technical assistance from the Office of Education and other constituents of HEW, and from the Justice and Labor Departments.

Nor is this all. To make up for the shortage of trained workers, the Government has awarded grants for 26 training programs that range in length from 2 weeks to 3 years. These programs include centers at 6 universities; and institutes, workshops, and seminars.

The Office of Education's concern in the whole matter is centered on the establishment of educational programs which will help to prevent delinquency. It advocates closer relations between school and community, early discovery of talent, better guidance services, visiting teachers, community recreation programs with trained staffs, remedial work on the fundamentals, enrichment programs that draw on all of a community's cultural agencies, school-work programs to keep children in school who otherwise would drop out completely, and rehabilitation programs in corrective institutions that will motivate young people to return to school and a wholesome program of work and recreation.

Joint committee on mental health in the schools

The Public Health Service and the Office of Education have formed a joint committee to consider the question of *who*, at the State level, *is responsible for what* in caring for the mental health of school children. Its ultimate goal is the drafting of a statement of policy that the Council of Chief State School Officers, the Association of State and Territorial Mental Health Authorities, and the Association of State and Territorial Health Officers can adopt as a guide for State agencies in the cooperative effort to promote mental health in the young.

Four members of the committee are from the Office: Fred F. Beach (chairman), Roman Mackie, and Elsa Schneider from the Bureau of Educational Research and Development; and

Frank L. Sievers from the Bureau of Educational Assistance Programs. Two come from the Public Health Service: William Hollister, National Institute of Mental Health; and Carl S. Shultz, Division of Community Health Services.

Education for the talented

An Office activity previously known as "Project Able" has been named the Office of Education Talent Development Project. Plans call for the project to publish a casebook of significant practices in identifying and developing talent, a series of bulletins and a handbook on guidance and counseling of the talented, and a series of articles describing project activities; to hold regional and national conferences; to establish a clearinghouse of information; to support basic and applied research; to establish demonstration centers; and to conduct seminars on research development.

Two Officewide committees are responsible for the project: A policy committee headed by William E. Gescheider, program review officer, Bureau of Educational Research and Development; and a professional committee composed of specialists representing the various interests and levels of education and headed by J Ned Bryan, specialist in the education of gifted and talented children and youth.

Project Social Studies

Project Social Studies, an Officewide undertaking that cuts across all levels of education, has announced that funds are available this fiscal year for launching two curriculum study centers. Each can receive as much as $25,000 this year, and as much as $50,000 in each of the next 4 years.

Applications for support will be entertained from colleges, universities, and State departments of education; proposals should be submitted only for centers that will attempt to fulfill one or more of these purposes: (1) Redefining the nature and aims of the social studies curriculums at various levels, (2) developing the instructional methods and materials to meet specific needs, (3) experimenting with new methods and materials and evaluating and revising them, and (4) disseminating information about the most promising practices.

The general goal of Project Social Studies is to improve research, instruction, teacher education, and dissemination of information. This year, in addition to the curriculum centers, the Office will support a number of basic and applied research projects and activities designed to stimulate research or to synthesize research already completed. Applications for support for both the centers and the research projects should be submitted to the Cooperative Research Program, which provides funds for these activities.

Deputy Commissioner of Education Wayne O. Reed and the plaque he received during the 16th annual Air Force Association Convention in Las Vegas on September 18–23. It represents the University Aviation Association award, given to Dr. Reed for his outstanding contribution to aerospace education.

Two Office committees are in charge: A professional committee, of which Gerald Smith is chairman and Wilhelmina Hill is vice chairman; and a policy committee, of which William Gescheider is chairman. These committees arranged for a conference to be held in the Office of Education early in November. The purpose of the conference, which was attended by representatives from the academic disciplines and education, was to provide the Office with guidelines for its efforts in this field.

Training for teachers of the deaf

Teachers and would-be teachers of the deaf are now learning the details about next year's training programs available to them under Public Law 87–276.

The law, passed in September 1961, authorized an appropriation of $3 million to be distributed over a 3-year period to colleges and universities with programs for training teachers of the deaf. This year 43 institutions in 29 States and the District of Columbia are receiving support grants under the law, and 446 students are receiving stipends—$1,600 for undergraduates, $2,000 for graduates. The institutions apply for aid to the Office of Education; the students, to the institutions of their choice.

Ralph L. Hoag, the Office's new specialist on educational programs for the deaf, says that announcements and application forms for next year have gone out to presidents of colleges and universities that have schools of education, to State superintendents of education, to State speech and hearing clinics, and to administrators of schools that have special classes for the deaf.

Experts exchange ideas on teaching reading

Between 35 and 40 persons attended the conference called by the Office of Education, Nov. 14–16, to discuss current practices in teaching young children to read. All the participants had worthwhile ideas to contribute, either in the papers they presented or in the panel discussions. The subjects included the trends since 1900 in teaching reading, the various methods and materials being used, experimental studies, research findings and needed research, experiments in Canada and England, and the development of young children.

Since any examination of teaching beginning reading must take into account information on how children grow and develop mentally and physically, experts from medicine and related fields were invited to take part in the conference. As a result, university professors of education, directors of reading clinics, elementary school principals, curriculum coordinators, and teachers of reading were able to exchange ideas with the director of the Gesell Institute of Child Development; representatives of the American Montessori Society, the

International Reading Association, and the Association of Childhood Education International; the director of the psychiatry clinic in a children's hospital; and an ophthalmologist and optometrist who have studied the relation between vision and reading.

The conference was planned and directed by a committee of Office staff members: Warren G. Cutts, specialist in reading, chairman; Lillian L. Gore, specialist in early elementary education; and Helen K. Mackintosh, chief, Elementary Schools Section.

ETV aid—Present status

The supplemental appropriation bill which would have provided funds for the administration of the educational television act (Public Law 87–447) did not pass the 87th Congress. It is believed, however, that a new supplemental appropriation bill will be submitted soon after the 88th Congress convenes in January. In the meantime the Department of Health, Education, and Welfare continues to maintain files on activities in educational television broadcasting in each State. The Department believes it would be advisable for all who are planning to apply for Federal assistance to prepare the following items for these files: Abstracts of proposed projects showing amount, time of filing, and purpose of requests; copies of local, State, and regional plans and engineering surveys; and information on major changes and developments in ETV agencies. (For more on P.L. 87–447, see *School Life*, June 1962, pp. 30–31.)

Media committee approves new grants

The committee which advises the Office of Education on its educational media program under the National Defense Education Act held its second meeting of 1962 on October 24–26. It approved a number of grants for research; details will be announced later. For a summary of its suggestions for the program in the future, see Dr. Spaulding's column, page 17.

Members of the committee are Marion Abramson, New Orleans, Louisiana; Thomas D. Bailey, State superintendent of education, Florida; John Carroll, professor of education, Harvard University; John Codwell, principal, Jack Yates Senior High School, Houston; Bowen C. Dees, assistant director for science, personnel, and education, National Science Foundation; Margaret W. Divizia, head supervisor, audio-visual section, Los Angeles Public Schools; John W. Gardner, president, Carnegie Corporation of New York City; Armand L. Hunter, director, division of broadcasting services, Michigan State University; Wayne O. Reed, acting U.S. commissioner of education; Paul C. Reinert, president, St. Louis University; Harry Skornia, professor of education, University of Illinois; William E. Spaulding, president, Houghton Mifflin Publishing Co.; Raymond H. Wittcoff, president, Transurban Investment Corp.; and Jerrold Zacharias, professor of physics, Massachusetts Institute of Technology.

Increased interest in civil defense

If requests for material and assistance to the Office of Education's Civil Defense Education Staff are an indication, the interest of the people of the United States in civil defense education has risen sharply since the Cuban crisis. By all reports to the Office, the civil defense adult education programs now operating in 39 States, the District of Columbia, and Puerto Rico are being taxed heavily. In one town in Vermont over 300 people turned out for a class scheduled for 50; in Des Moines 750 for a class for 250. In many places, classes are being organized or expanded with no loss of time.

The Civil Defense Adult Education program administered by the Office of Education under the supervision of the Office of Civil Defense, has grown quietly but steadily since it began in 1959–60. In that year, four States took part in a pilot project which trained 2,400 instructors and enrolled 46,000 adults. In 1960–61, three more States took part; in 1961–62, eight more. By March of this year, the Office estimates, over 413,000 teachers and adult students had taken part in the program.

The 12-hour civil defense adult education course provides instruction on personal and family protection in case of manmade or natural disasters. The student who completes the course receives a certificate. The Office of Education recently revised the content of the course to bring it in line with current civil defense principles.

Advisory panel considers OE statistics

The Office of Education's ad hoc Advisory Panel on Educational Statistics held its first meeting on November 13–14, in Washington, under the chairmanship of O. Meredith Wilson, president of the University of Minnesota.

In its 2-day meeting, the panel heard an address by Wilbur J. Cohen, Assistant Secretary of Health, Education, and Welfare; considered quality in education with emphasis on the human aspects as distinguished from physical facilities, finances, etc.; and set up two subcommittees. The subcommittees will develop recommendations on the collection of reliable annual information on pupils' accomplishments and on quality of staffing.

Serving with Dr. Wilson on the panel are the following persons: Harry Alpert, University of Oregon; Felton G. Clark, Southern University; Gertrude M. Cox, Research Triangle Institute (Durham, N.C.); C. Allen Fort, Illinois State Department of Public Instruction; Robert J. Henle, St. Louis University; Robert E. Hewes, Massachusetts Institute of Technology; Owen B. Kiernan, Massachusetts State Department of Education; Sam Lambert, National Education Association; Rensis Likert, Institute for Social Research, University of Michigan; Isador Lubin, the Twentieth Century Fund; Clarence Scheps, Tulane University; Frederick Stephan, Princeton University; Ronald B. Thompson, Ohio State University; Sidney Tickton, the Ford Foundation; and Elmer West, American Council on Education.

The panel will meet again on December 17–18 to continue its work.

State survey of language equipment

A survey is in prospect for discovering precisely what audio and visual equipment local schools have purchased, with the aid of Federal funds under title III of the National Defense Education Act, for the improvement of instruction in modern foreign languages.

Hundreds, even thousands, of schools have made such purchases. About 5,000 schools now have what the State departments of education call "some kind of language laboratory." Thousands of others have something less. But what they do have, exactly, has never been counted on any wide scale; and the State departments feel the need now to take stock, both to determine where their schools are and to measure their needs for the future. They want to know how many schools have only a tape recorder and a few sets of earphones; how many have complete laboratories; and how many fall somewhere between these two extremes in the wide range of possible installations. They want to know, too, what use the schools are making of the equipment.

Because both the State departments and the Office of Education seek ways of evaluating the effects of title III, they have worked out a cooperative plan for a survey. The Instructional Equipment Branch of the Office, in consultation with several State supervisors of foreign language instruction, has prepared a basic questionnaire which any State can use to gather the information wanted. Joseph Hutchinson, specialist for foreign languages who directed the Office's contribution to the effort, says that the questionnaire now has been offered to all the States. As of December 10 more than 20 States have informed Dr. Hutchinson of their plans to use the questionnaire.

Project English

Curriculum study centers

Curriculum study centers in English have been established at Hunter College, the University of Minnesota, and the University of Oregon under Project English, the Office program to raise the quality of English curriculums and instruction. Each center will conduct a 5-year program financed by the Office of Education under the Cooperative Research Program and the sponsoring institution.

The Hunter College Center, directed by Marjorie B. Smiley, will develop and try out materials for teaching English (with emphasis on reading) in grades 6–11 to children from culturally deprived neighborhoods.

The Minnesota Center, directed by Stanley B. Kegler, will prepare and evaluate materials for language study in grades 7–12. It will concentrate on developing a curriculum in which pupils can learn the history, characteristics, structure, and uses of English.

The Oregon Center, directed by Albert R. Kitzhaber, will develop a curriculum in language, literature (including reading), and written and oral composition in grades 7–12 for pupils of all levels of ability except the lowest.

For information on centers previously approved, see *School Life*, May 1962, pp. 8–10.

Applications invited

The Office of Education has funds available for a small number of English demonstration centers in which local schools may test and exhibit techniques and materials for students. Colleges, universities, and State departments of education interested in conducting a center should write to J. N. Hook, Coordinator of Project English, Office of Education, Washington 25, D.C. Local school systems may apply through their State departments of education.

Ten new research projects

The Office has negotiated contracts for 10 new research studies under Project English: 4 of the studies are in linguistics, 3 in reading, 2 in college freshman composition, and 1 in elementary spelling. (See *School Life*, May 1962, p. 10, for list of projects previously approved.) The new projects are listed below by institution, director, and subject:

University of Buffalo, Henry Lee Smith, Jr. The application of descriptive linguistics to the teaching of English.

University of California (Los Angeles), Edward G. Carterette and Margaret Hubbard Jones. The child's acquisition of language.

The Ohio State University, Frank J. Zidonis and Donald R. Bateman. Effect of knowledge of generative grammar on growth of language.

Connecticut State Department of Education, Westport public schools, V. Louise Higgins. The identification of grammatical constructions that junior high school pupils need to study intensively, the contributions that linguistic scholars can make to teaching these constructions, and the preparation of lessons.

University of Wisconsin, Theodore L. Harris. What effect the habit of reading at varying speeds has on children's comprehension, speed, and stress.

University of Chicago, Helen K. Smith. Instruction of high school freshmen in reading.

Hollins College (Roanoke, Va.), F. J. McGuigan. Silent speech during reading.

Grambling College (Grambling, La.), L. J. Carter, Bessie E. Dickerson, and Tilden LeMelle. A comparison of laboratory and conventional methods of teaching remedial English to college freshmen.

Fairleigh Dickinson University (Teaneck, N.J.), J. E. Tohtz and Gerhard Lang. The comparative effectiveness of out-of-class programed instruction and conventional workbook and handbook assignments in teaching the expository use of the English language.

State University of Iowa, Hale C. Reid, Cedar Rapids public schools. An evaluation of five methods of teaching spelling.

Two of the many persons who visited the Office of Education's first major exhibit on programed instruction, which opened in Washington, October 22. A part of the display is itself "programed," and visitors learn about the subject by walking through a program on it. They operate a teaching machine, see slides showing the machines on the market, watch a film on pupils at work, and hear taped comments by teachers and pupils who have used automated programs. Among the attractions is a large library of academic programs on a wide range of subjects. The exhibit was prepared by the Center for Programmed Instruction, Inc., under contract with the Office of Education. In November it began a tour of six cities—Louisville, Ky., Nov. 1–3; New Orleans, Dec. 17–24; St. Joseph, Mo., Jan. 31–Feb. 2; Atlantic City, Feb. 16–20; Oklahoma City, March 30–April 3; and Denver, Apr. 21–26.

Investment in information

Project English is using $16,000 of its funds to obtain information from Project Talent, a study of about 440,000 high school pupils conducted by John C. Flanagan of the University of Pittsburgh under an OE cooperative research contract. The Project is asking for information on the correlation of spelling and reading ability, reading scores and magazines available in pupils' homes, English scores and pupil mobility, English scores and dropouts, and on the interrelation between scores on usage, punctuation, spelling, effective expression, word functions, clerical checking, types of reading, table reading, health, intelligence, and total information.

This cooperation between Project Talent and Project English is a good example of the support one research study can give to another. As more OE studies are completed there will very likely be many instances of such reinforcement.

OE expands English staff

The Office of Education is expanding its staff to include specialists in the teaching of English at all three levels of education. Donald R. Tuttle has recently been appointed to fill the new position of specialist in college English.

Dr. Tuttle will represent the Division of Higher Education in Project English. As other specialists are appointed, they too will work with Project English.

Dr. Tuttle is former professor of English at Fenn College, Cleveland, Ohio; former vice president and program chairman of the National Council of Teachers of English, and chairman of its committee on teacher preparation and certification. He has served as consultant on Coleridge to the *Publications of the Modern Language Association.*

The language children use

"The oral language children use is far more advanced than the language of the books in which they are taught to read. . . ." Quoted from the report of an OE cooperative research study, *The Language of Elementary School Children: Its Relationship to the Language of Reading Textbooks and the Quality of Reading of Selected Children,* by Ruth Strickland. Bureau of Educational Studies and Testing, Indiana University, Bloomington, Ind., $1.25.

Changes in training programs for foreign visitors

Since July the Technical Training Section of the Bureau of International Education has supervised the training programs of 702 foreign participants under the technical assistance program administered by the Office of Education for the Agency for International Development. The section expects 800 to 850 trainees this fiscal year (July 1962 through June 1963) from many parts of the world—wherever AID has programs. Last fiscal year it arranged programs for 796 participants from 50 countries. Since some of these programs are still in effect, the section is currently working with over 500 participants.

Projects are becoming somewhat more complex and of longer duration. Countries that have been taking part in the program for several years, for example, are requesting training for university teachers or high level officials, where they had formerly concentrated primarily on programs in elementary, secondary, and vocational schools—perhaps a reflection on the success of the program. On the other hand, the new nations are submitting projects in elementary, secondary, and vocational education.

Language is always a problem. The Technical Training Section is trying to arrange some group programs where the medium of communication will be in a "third" language—not the language of the trainee (which may be Swahili), not English, but, for instance, French or Spanish, which many of the participants know. The section has arranged, for instance, a 4-month program in school administration to be conducted in French for a group of Congolese.

Until recently most training programs were for 6 to 12 months, but now more AID participant programs are scheduled for 2 to 4 years and lead to degrees. To ease the task of evaluating the participant's qualifications to enter a U.S. university, good counseling and guidance and more extensive knowledge of foreign educational systems are necessary. This is particularly true in regard to the new nations.

One thing remains constant in the program—each case is developed in accordance with specific instructions from the AID mission.

For a complete story on the technical training program administered by the Office of Education, see "A Decade of Technical Assistance," by John W. Grissom, chief of the Technical Assistance Section, in the March 1962 *School Life.*

Recruiting educators for UNESCO

To find out how the Office of Education can improve its program for recruiting U.S. educators for UNESCO (United Nations Educational, Scientific, and Cultural Organization) projects, a specialist of the Education Missions Section, Nathan A. Pitts, made a visit to UNESCO headquarters in Paris in November. He is conferring with officials in several departments, particularly those for personnel and education. His visit may result in a followup study by the Office of Education of the educators it has recruited for UNESCO, to evaluate their effectiveness. On the way from Paris, Dr. Pitts visited education officials in the United Kingdom and the Netherlands to see how they recruit for UNESCO.

The Bureau of International Education, of which the Education Missions Section is a part, is responsible for recruiting U.S. educators for UNESCO technical assistance programs for the Office of International Administration of the Department of State.

Local schools are invited to invite foreign teachers

The Teacher Development Section, OE Bureau of International Education, is always on the lookout for U.S. schools with new and unusual teaching programs. Such schools can contribute to the international teacher development program by inviting foreign teachers to observe in them. The itinerary of most teachers on a program includes 3- to 5-week stays in local communities to visit schools, among other activities. A school administrator with an unusual program, interested in receiving a foreign teacher, should write to the Teacher Development Section, Bureau of International Education, Office of Education, Department of Health, Education, and Welfare.

Special note: Since many of the teachers are from Latin America and do not speak English, the Section is particularly interested in arranging programs in the Spanish departments of schools, colleges, and universities.

Teachers from abroad visit aerospace exhibit

A group of 68 teachers from 33 countries taking part in the teacher development program attended the Air Force Association's 16th Annual Convention and Aerospace Panorama in Las Vegas in September, before going to the universities to which they were assigned. OE's Educational Exchange and Training Branch of the Bureau of International Education arranged for the group to attend the AFA convention to give them an opportunity to gain an understanding of education for the space age as practiced in the United States.

The group attended an aerospace education seminar sponsored by the Aerospace Education Foundation; went on a guided tour of the panorama; and saw an air tactical demonstration at the Indian Springs Gunnery Range. During the seminar they heard such speakers as Edward Teller of the University of California, Donald Michael of the Peace Research Institute, Lindley Stiles of the University of Wisconsin, and Irby Carruth, president of the American Association of School Administrators.

A side trip to nearby Hoover Dam concluded their stay in Las Vegas.

The Educational Exchange and Training Branch arranged the trip so that the teachers could see the peaceful and military uses the United States is making of science.

Foreign credentials evaluation

Among the services of the Office of Education to international education is the advisory evaluation of the foreign academic credentials of persons who have studied abroad and wish to continue their education, practice a profession, or find employment in the United States. The evaluation the Office makes is stated in terms of approximately equivalent levels of achievement in the United States. The Office's evaluation service is in no way official; it is a courtesy service to help U.S. institutions and agencies to reach decisions on applicants presenting foreign academic credentials.

The number of requests to the Office for evaluation of credentials is increasing. In the last fiscal year (June 1961–July 1962) the Comparative Education Branch, which performs the evaluations, received over 6,000 requests. In the fiscal year before it received about 5,000 requests.

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JOHN WALKER

Art education and the National Gallery of Art

WHEN and how should young people receive a training in the practice of art and a knowledge of the achievements of human genius in this field? I have looked back on my own education to see if I could discern a helpful pattern. But I have decided that I am atypical. I had a tutor, and so I did not go to school early enough to be taught drawing, as children are taught it in most schools today. I still can't draw. I live in a recurrent nightmare that at one of those parties where pencils are passed out and the helpless guests are asked to draw a picture for some kind of charade, the Director of the National Gallery of Art, unable to represent anything, will have a nervous breakdown on the spot.

When I was a boy, though drawing was taught in public schools, most children had their free time reluctantly devoted to music lessons. The performance of music by amateurs has, it seems, declined in recent years. Instead, children and parents alike have become weekend painters. Thus, there has been a welcome auditory relief, but there has also been an equal ocular distress; and worse still, a great and difficult problem has arisen: how to dispose of those square miles of canvas being daily covered with paint. If our Sunday painters would only adopt the technique of the Navahoes, who work in colored sand and who erase their creations every evening, this problem would happily vanish.

Sunday painting, however, has a positive value. It makes people visually aware, and visual awareness has particular significance today. We live in a world of pictures, as never before in history. If only they were better pictures! Our eyes are constantly corrupted, alas, by base and vulgar images: billboards that make it difficult to see the countryside; pictorial magazines that wordlessly convey their trite messages; television and movies that hypnotize and paralyze the ocular nerve until all sense of visual taste is gone. Little wonder that artists have retreated into a world of abstraction—a world as far away as possible from the vulgarity thrust upon our eyes by nearly everything we look at.

People need to be taught to see, to perceive, and to discriminate. In spite of all the teaching of the practice of painting in our primary schools, we have not instilled in many people perceptive, visual discrimination, in simpler words, good artistic taste. The Massachusetts Institute of Technology adopted 6 years ago a report advocating the requirement that all undergraduates, regardless of their field of concentration, study the visual arts. The fundamental reason given was that the committee found that the students coming to M.I.T. were artistically "illiterate," that they had not learned the "A B C's of seeing." The committee prescribed, as the remedy for this lack of awareness, that the students come in contact with the great visual monuments of our inheritance.

Education has been defined as "the habitual contemplation of greatness." I see no reason why a student's experience of greatness should be restricted to science, literature, or history. In no field can the greatness of an historical act be shared as fully as in the visual arts: in painting or in sculpture, the original act was from the outset one of communication, and a communication not blocked by the obsolescence of theory, as in science; or by the barrier of language, as in literature; or by the complexity of the unknowable, as in history; or, even, by the mediation of a performer, as in the sister art of music. One stands in the National Gallery in the presence of a brushstroke put there by Rembrandt's hand, and one contemplates greatness directly.

Though the teaching of the practice and appreciation of painting and sculpture is relatively new in our schools and colleges, one should remember that Plato considered discrimination in art as a vital aspect of education. To quote his own eloquent words—

> But we must look for those craftmen who by the happy gift of nature are capable of following the trail of true beauty and grace, that our young men, dwelling as it were in a salubrious region, may receive benefit from all things about them, whence the influence that emanates from works of beauty may waft itself to eye or ear like a breeze that brings from the wholesome places health, and so from earliest childhood insensibly guide them to likeness, to friendship, to harmony with beautiful reason . . .
>
> Yes, that would be far the best education for them.

And in Christian times Dante spoke of art as "the grandchild of God." But neither the trivium nor the quadrivium of the Medieval university included art, although the quadrivium, the "higher" divisions of the several liberal arts, did include music. It was really in the

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Renaissance that art gained intellectual respectability, both by precept and by example. Still, it was not until the second half of the 19th century, principally in Germany, that art history became recognized as a subject.

In 1874 art history reached America, surreptitiously and in a characteristic disguise. Charles Eliot Norton at Harvard gave a course entitled, "The History of the Fine Arts as Concerned with Literature." Even in 1954, when I served on a committee appointed by President Pusey to report on the visual arts, primarily at Harvard but also at American universities in general, we found that many of the faculties we interviewed accepted at least this much of Christian doctrine, "In the beginning was the Word"; and the "word," believe me, was sacred.

When we argued for images as well, few iconoclasts of the 8th century were more violent than some of the teachers of English, of history, and, ironically, even of aesthetics. One professor of aesthetics we interviewed said that unfortunately there was not time enough to take his students to look at works of art! The dogma seemed generally accepted that real education was to be found in the library and the laboratory. Museums were all right for recreation, and it was nice to have one on the campus; but as a place for the concentrated scrutiny of works of art, a place where informed looking might be developed, a place where an ultimate perception of visual quality might be learned, to attribute to a museum such purposes seemed to most professors barely permissible and certainly not to be encouraged.

Though Harvard has a brilliant faculty of the history of art, we never succeeded, in spite of valiant efforts, in gaining for their department the respectability of a wholehearted acceptance by the powerful Division of General Education. And as for the practice of art, its place was on the outermost periphery of the curriculum, where I imagine it was hoped few undergraduates would notice it.

This was 8 years ago, and many of the recommendations we made have subsequently been adopted. Harvard is even building a school of design, and faculty members are often seen at art exhibitions.

Moreover, it was heartening to discover recently when we made our own investigation of American universities that there were over 110 with significant faculties teaching the history of art. To these universities we gave 500 original 2 x 2 inch color slides of works of art in our collection for a handling charge of $25. Because of the limited number of sets we could give away, we have a waiting list for the next production, which will begin as soon as I can raise more funds.

Thus, I feel sure that the history of art is being increasingly taught in our universities. I believe, on the other hand, that it is at the precollege level that the greatest challenge lies. The importance of precollege teaching of art has recently been recognized by the College Art Association, which has detailed a committee, under Professor Forbes Whiteside of Oberlin, to study the situation. Other groups have similarly shown an interest in improving standards at this level, such as the National Art Education Association, the Joint Council on the Arts in Education, and the International Society on Education Through Art.

Figs. 1–3, top left, *Lorenzo de' Medici* (Kress collection); top right, *Giuliano de' Medici* (Mellon collection); both by Verrocchio, 1435–1488, Florentine; bottom row, *Lorenzo il Magnifico* and *Giuliano de' Medici, The Pazzi Conspiracy* (Samuel H. Kress collection), by Bertoldo di Giovanni. National Gallery of Art.

The situation of art in our schools today is extremely difficult to define. As Dr. Conant stresses again and again, the variations between schools and school boards are so great that generalizations are almost impossible. This certainly is an area in which the Office of Education in Washington could be of the greatest usefulness, and I have urged them to take on this job. The Bureau of Labor Statistics is surely one of the Government's most valuable and successful arms. A comparable arm to give a full accounting of what is actually happening in our schools would likewise be of the most enormous benefit.

As far as I can determine, the variations in requirements of art teachers in schools around the country range from 24 up to 60 credit hours in different States. Their major requirements are in practical art classes and in art

education courses, which stress methods of teaching the practice of art. There are far fewer required courses in art appreciation, and in only a few instances are there any requirements at all that a teacher study the history of art.

I do not wish to belittle the importance of teaching the practical aspect of art in schools. We need excellent artists in our society as much as we need excellence in other fields, and these courses can provide the opportunity for young people to find out whether they want to make art their career. The important thing is that this approach be geared to the vast majority of students who are not born, as I readily confess I was not, with a high degree of manual dexterity. It is the act of performance that is important here, not the end product. And painting a picture or modeling a statue has enormous educational potential. It entails problem-solving, fully as much as an experiment in science, an exercise in algebra, or a complex Latin sentence. And more than these, it puts a premium on originality, inventiveness, and expression in a wholly new, nonverbal language.

Art practice, with a smaller degree of art appreciation or art theory, is probably most successful at the primary level. At this age, children are uninhibited, unselfconscious, and the language of art comes naturally to them.

But as soon as we are faced with the adolescent, a whole new set of educational challenges emerges. By this time, his mental and verbal faculties have developed. These must be brought into play. Too often, art courses, fighting for survival as electives, degenerate into play periods without offering the student any of the enormous cultural enrichment latent in the subject. Too often the teacher has so little background in the historical and cultural significance of the material that the only guidance given is in watered-down aesthetic terms. The student, as I have said, must be exposed to greatness, but he should also be guided into an informed perception that will enable him to discern what greatness is.

The National Gallery of Art can help you open up to your students the world of beauty inherent in great paintings and sculpture. To accomplish this, these are the services we offer you.

Three traveling exhibitions of large framed reproductions may be borrowed for the cost of shipment. These, as educational material, travel quite inexpensively by truck freight; no insurance is necessary. The pictures are accompanied by explanatory labels, ingeniously attached to the frames so that they can be displayed or folded up behind the pictures. We also offer an exhibition describing the techniques of painting, with reproductions and reconstructed details included. It supplies an excellent basis for understanding both the limits and potentialities of art. Another exhibition which may be borrowed is for handling in classrooms. This one is made of smaller color reproductions, mounted on cardboard, each picture accompanied by a very full text giving information about artist, subject, technique, and style. All of these exhibitions may be secured by sending a card to our Extension Service Office.

Figs. 4 and 5, above, *Fur traders descending the Missouri*, George Caleb Bingham, American 1811–1879 (Morris K. Jesup Fund), the Metropolitan Museum of Art; below, *Siegfried and the Rhine Maidens*, Albert Pinkham Ryder, American 1847–1917 (Mellon collection), National Gallery of Art.

From the same office you may also choose any one of seven slide lectures which will be mailed to you free of charge. Texts, written by well-informed art historians, can be read as the forty or more 2″ x 2″ Kodachrome slides are shown, or may be used as background material by the teacher in preparing his or her own discussion. Technical terms are thoroughly explained and foreign names are given in phonetic spelling. Titles include *Survey of American Painting*, *Backgrounds of Modern Painting in France*, 700 *Years of Art*, *Five Techniques of*

Painting, American Textiles, The Christmas Story in Art, and *The Easter Story in Art.*

Two motion pictures are also circulated by the Gallery. *Art in the Western World,* 16 mm., 30 minutes, in color with sound, presents an admirable survey of the Nation's collection and traces the development of art from the Middle Ages to the present. *Time Enough to See a World,* 16 mm., 30 minutes, in color with sound, is a critical examination and study of a few outstanding paintings.

In addition to these free services, the National Gallery makes available to schools several items at very moderate cost. Color slides, each one an original taken directly from the work of art, may be purchased for 35 cents each. Black and white slides of sculpture, painting, and graphic arts are also available. Twelve filmstrips in color may be bought; ten have instructive captions, while two of them have accompanying texts and recordings. A picture packet with comprehensive notes on each work is another offering which has had wide use in schoolrooms. Ten booklets, each containing 16 color plates and texts written by our curators, cover the various schools of painting represented in the Gallery's collection. These may be bought at 25 cents each. Lists of these various teacher aids are available from our Publications Office.

There are two further programs we have undertaken which have been very successful and which I believe will be of interest to the readers of this magazine. Both have been undertaken with private funds. Both are still in a pilot-plan stage, but in both cases we now have enough experience to recommend them for further foundation support.

The first is the use of color reproductions in colleges. We selected 25 large collotype reproductions, illustrating the history of European and American painting, and had them well framed. We gave one set to St. John's College, Annapolis, and one set to the Coast Guard Academy in New London—we thought these two institutions were as different as two colleges could be. Each reproduction is accompanied by a text explaining why it is a masterpiece of art. The reproductions were shown first as an exhibition in one of the corridors at both colleges. Afterwards, they were placed in common rooms and dining halls. At St. John's the texts were removed after the exhibition; at the Coast Guard Academy, I believe, they were left on. Both colleges plan to reassemble the reproductions from time to time as a single show. The program has had a great success with faculty and students. I hope to get foundation support for a further distribution.

The second program, which like the first has been financed by the A. W. Mellon Educational and Charitable Trust, has to do with high schools. I proposed to the Pittsburgh School System that the supervisor of art and the supervisor of English get together for a joint program for the senior classes of all Pittsburgh high schools. The proposal I made was for an essay contest on a subject relating to the collection of the National Gallery. We sent out books on our works of art for the school libraries, reproductions of our paintings, films on our collection, and slidestrips. Fifteen high schools held competitions among their seniors, and 15 winners, chaperoned by two teachers, came to Washington for a weekend to see the National Gallery, the Congress, the Supreme Court, and other sights. They returned with presents of more reproductions for themselves and for their schools.

We have done this for 3 years running, and the English department and the fine arts department of the Pittsburgh School System are both delighted. Miss McKibbin, director of art, wrote me, "It is hardly necessary for me to assure you of the real value these trips to the National Gallery are having on the lives of our young people. I believe they are also quite important to the teachers involved. The experience is a unique one for city youngsters whose backgrounds have not stressed the cultural in our contemporary life." It is an exciting experience to talk with the winners. It is surprising how many are science students, usually winners of college scholarships. Several told me that if it had not been for the competition they would never have looked at a painting. Now they felt a whole new world had opened up.

But I don't want my readers to think I am advocating only "art for art's sake." Works of art can help you to teach other disciplines. Take, for example, the social sciences. Suppose in a European history course you want your students to understand the Italian Renaissance. Lorenzo de' Medici was a pivotal figure. How can you make him and the age he lived in vivid to your students, make him more than a name of an obscure Italian, who had the good taste to die in the year that America was discovered, thus causing at least his death date to be unforgettable?

I suggest you show your students Lorenzo's bust by Verrocchio, in the National Gallery, (fig. 1), and I believe an image will remain in their minds of this extraordinary human being, the greatest art patron the world has known. Then suppose you reinforce this image with another bust by Verrocchio of Lorenzo's younger brother, Giuliano, also in the National Gallery (fig. 2). And then follow this up with a description of the most sacrilegious murder in history. Remind your pupils how Giuliano was slain at the foot of the high altar of the Cathedral of Florence in a conspiracy organized by the Pazzi family. Point out that the signal for the onset of the assassins was the tinkle of the bell rung at Mass to mark the Sanctus. Lorenzo

happened to have on his shirt of mail under his doublet and escaped. There is a contemporary medal we have at the Gallery, which shows the actual murder taking place (fig. 3.) The conspirator who should have slain Lorenzo excused his failure by saying that he was inexperienced in using a knife. The slip of a stiletto caused the collapse of the conspiracy, and the conspirators were hanged by their heels from the towers of the Palazzo Vecchio until their bodies had decomposed. Other historical periods might be similarly vivified.

Figs. 6 and 7, left, *Enthroned Madonna and Child*, Byzantine School, XIII Century (Mellon collection); right, *Gypsy Woman With Baby*, Amedo Modigliani, French 1884–1920 (Chester Dale Collection). National Gallery of Art.

You can make a course in American literature equally vivid by the selection of a few paintings to illustrate your course. Suppose you are talking about authors as different as Mark Twain and Edgar Allan Poe. Here is a passage from *Huckleberry Finn*:

> It was a monstrous big river down there—sometimes a mile and a half wide; . . . Not a sound anywhere—perfectly still—just like the whole world was asleep, only sometimes the bullfrogs are cluttering, maybe. The first thing to see, looking away over the water, was a kind of dull line—that was the woods on t'other side; you couldn't make nothing else out; then a pale place in the sky; then more paleness spreading around; then the river softened up away off, and weren't black anymore, but gray.

Note how the wonderfully musical prose of Mark Twain is perfectly illustrated by this painting by George Caleb Bingham in the Metropolitan Museum (fig. 4), which not only seems to depict the scene Mark Twain has described but also reveals pictorially the same flowing rhythms and idiomatic cadences which marked the prose passage.

Or turn to Edgar Allan Poe, and where could one find his spellbound valleys and watery landscapes better suggested than in the paintings of Albert Ryder. In a canvas like the one in the National Gallery of Art of *Siegfried and the Rhine Maidens* (fig. 5), you see the perfect illustration of Poe's "Dim vales and shadowy floods and cloudy-looking woods."

My plea, then, is to make art spill over from the art classes into other courses—the various social studies, English, French, Latin, or other language fields. But to do this art teachers must be able to help their colleagues find the right works of art to use as illustrations. They must have more general culture and more knowledge of the history of art than is often the case at present.

But even in the art class itself, in my opinion, it is not enough to have a knowledge of design and to be able to discuss composition and color. For a deep appreciation of a work of art arouses many associations which go far beyond an analysis of formal qualities.

To illustrate what I mean, let us look at two paintings which are remarkably similar from the point of view of design. The one is a Byzantine Madonna in the National Gallery of Art (fig. 6), painted about 1250, and the other is a canvas by Modigliani, entitled *Gypsy Woman with Baby* (fig. 7), painted in 1919. Seven hundred years separate the two pictures, but the formal aspects of both have much in common. These similarities go beyond the fact that both show a mother and child. Note, rather, the same simplicity of outline, the same graceful pattern of curves. In both pictures there is a tendency to reduce space occupied by the figures to an unnaturally shallow depth. Again we see in each picture similar elongations, similar distortions. The design problems of a Byzantine artist of the 13th century and those of a painter of the school of Paris in the 20th century thus find similar solutions.

The art historian is quite conscious of these formal similarities, but for him they are not coincidental, nor do they prove that art is simply a matter of design, regardless of when and where it was made. With a knowledge of history and culture the art historian can make these similarities more stimulating to the pupil, because he can point out the vastly different intentions of the painter of 13th-century Constantinople and the painter of 20th-century Paris.

The Byzantine painter stylized his Madonna, because he wanted to remove her from the everyday world. Her face follows a pattern established centuries earlier, and it would have been heresy to depart from it. Mary's figure has no weight or volume, in accordance with her ethereal existence. Nor is there any space in the picture.

because the realm in which she dwells is outside space. The figures are immobile to convey the timeless, changeless aspect of divine beings, in accordance with Medieval thought.

Modigliani, on the other hand, stylized his figures for purely aesthetic reasons. He wished to solve an important problem of portraiture: How to paint a likeness and at the same time create out of facial features an aesthetically satisfying pattern.

I have stressed these similarities and differences because the appreciator, if he ignores associations outside the picture itself, might convey to his pupils the idea that both artists had the same intention—simply that of making beautiful designs and that they happened to make them in analogous ways. The teacher of art appreciation, preoccupied with unity, balance, rhythm, repetition, tends to substitute the bare bones of a diagram for the work of art itself. As a result, art is apt to be divorced from life and from reality.

In conclusion I want to repeat that I believe education in art is fundamental to the concept of education itself. It deals with Man, making him more aware of his environment and of his previous inheritance. Above all it teaches him to see with discrimination.

Although art education is a late-comer, its presence is now widely acknowledged; but as an elective it is often without great prestige and is not yet doing the job it should. I have pointed out three basic approaches to art education which are current: The practice of art, the appreciation of art, and the history of art. I believe in a mixture, with the greatest emphasis on the intellectual discipline of art history at the college level and of the expressive field of art practice at the primary level, but the mixture of all three approaches should always exist. It is on the secondary level, in my opinion, that the greatest job needs to be done. Although we have no way of knowing exactly what is being done, which is the logical first step, we do know that the cultural approach is being underemphasized. Here the National Gallery stands ready to help you through the services I have mentioned.

We at the National Gallery feel an obligation and an opportunity. The Gallery belongs not to one city, but to the whole country, and we earnestly believe that with your cooperation we can enrich the lives of your pupils. If only they can come to know our collection and the collections of other museums, then they will find, as Louis MacNeice says, that, "Hundreds of windows are opened on a vital but changeless world—a daydream free from doubt." These vistas of beauty, which will come with an understanding and an enjoyment of art, we want with your help to offer to the thousands of pupils in our schools.

Criteria for evaluating

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MOST READERS of *School Life* are familiar with the increasing attention that has been given for the past few years to a new educational technique called programed instruction. This technique—really a variety of related techniques—is sometimes also referred to as programed learning or as a self-instructional or auto-instructional method. In many cases, though by no means invariably, the material is presented by special devices called teaching machines; in other cases it is presented in book form.

In current parlance, a self-instructional "program" means a sequence of material that is presented to the student individually, one small unit (for example, a sentence or a paragraph) at a time. Once or more in each unit (or "frame") of material, the typical program requires the student to respond actively—for example, by writing in a missing word or by selecting one of several possible answers to a question. In addition the program generally provides prompt confirmation or correction, as the case may be, for each response the student makes as he proceeds at his own rate.

After several years of experimentation an increasing number of programs are becoming available commercially for use in schools. A recent 400-page publication of the Office of Education, entitled *Programs '62*,[1] lists and describes over a hundred programs on subjects spanning the curriculum from elementary to college levels.

This article is primarily concerned with criteria for evaluation or "quality control" of self-instructional pro-

[1] The Center for Programmed Instruction, Inc., *Programs '62: A Guide to Programed Instructional Materials*. Washington, D.C. U.S. Government Printing Office, 1962. $1.50.

A. A. LUMSDAINE

...elf-instructional programs

grams. The need for control has long been foreseen, as the following remarks, made in the spring of 1960, indicate:

> In the production of programs a major problem could arise from premature publication and sale of hastily conceived and untested programs. . . . It would therefore appear that a high-priority objective is that of working out acceptable quality-control standards for programs.[2]

This kind of concern with quality-control standards or evaluative criteria was primarily responsible for the formation, in 1960–61, of a joint committee of three professional associations that are actively interested in the use and evaluation of programed instructional materials. These three associations are the American Educational Research Association, the American Psychological Association, and the Department of Audio-Visual Instruction of the National Education Association.[3]

The major long-term goal of the committee is the study and formulation of criteria or standards for evaluating the effectiveness of the self-instructional programs and the continuing revision of such criteria as required by the changing state of the art. In addition to its own work toward this objective, the joint committee maintains active liaison with various other groups—the Educational Testing Service, for example—that are also concerned with problems of program evaluation.

An initial task to which the committee addressed itself was the preparation of a short but carefully formulated statement that could be widely disseminated to provide authoritative public information about the characteristics of programed instruction. In this 1-page statement of interim guidelines the committee tried to point out the current limitations of programed instruction as well as its great potential value to education. After these guidelines had been drafted and revised in the course of several discussions by the committee and consultants, they were published in the *Audio-Visual Communication Review* and several other periodicals in the spring of 1961. Subsequently they were reprinted in the *NEA Journal* and a number of other educational journals.

In the winter of 1961–62 the committee, by its endorsement in principle of a statement drafted by Ernst Z. Rothkopf of the Bell Telephone Laboratories, provided further interim guidance to school systems interested in purchasing programs. Dr. Rothkopf has served as one of the committee's consultants, and his cooperation has been particularly helpful in furthering the committee's objectives. His statement, styled as a descriptive "label" for self-instructional programs, was published in the January-February, 1962, issue of the *Audio-Visual Communication Review*[4] and in the report of the 26th Educational Conference of the Educational Records Bureau and the American Council on Education.[5]

A further guidance statement just being completed by the committee is "Criteria for Assessing Programmed Self-Instructional Materials." It will be published shortly in the *Audio-Visual Communication Review* and other journals. In approximately 10 pages it considerably amplifies and extends the guidelines published by the committee in 1961, although it is addressed primarily to the nontechnical reader who is interested in the purchasing of programs. (A companion piece, to be completed early in 1963, will provide supplementary information and guidelines for the more technical reader who is concerned with obtaining, reporting, or interpreting quantitative data from research on the behavior of students using a program—data which indicate how effective the program is in reaching the desired educational objectives.)

The statement describes basic aspects and current status of programed instruction and presents some suggestions, cautions, and recommendations relevant to the evaluation of self-instructional programs. (Lloyd J. Brooks and J. A. Goodman assisted in preparing the report on which this article is based. The cooperation of a committee of the American Society of Training Directors, consisting of Leonard C. Silvern (chairman), Robert L. Craig, Stanley L. Levine, and Gerald H. Whitlock, has also been of assistance in contributing to the preparation of this report.) Several of the basic points stressed by the report are summarized below.

[2] A. A. Lumsdaine and R. Glaser, "Concluding Remarks," in *Teaching Machines and Programmed Learning: A Source Book*, p. 566. Washington, D.C., National Education Association, 1960.

[3] The AERA committee members include, in addition to the writer, Harry F. Silberman of the System Development Corporation, Evan R. Keislar of the University of California (Los Angeles), and Robert Glaser of the University of Pittsburgh and the American Institute for Research. The APA representatives are Richard S. Crutchfield of the University of California (Berkeley), James G. Holland of Harvard University, and Lawrence M. Stolurow of the University of Illinois. DAVI members are Wesley C. Meierhenry, University of Nebraska; Jack V. Edling, Oregon State System of Higher Education; Edward B. Fry, Loyola University (Los Angeles); and Paul R. Wendt, Southern Illinois University.

[4] Quoted by A. A. Lumsdaine, in "Some Critical Issues in the Improvement of Instruction Through Programmed Learning," *Audio-Visual Communication Review*, 1962, 10: 61–64.

[5] E. Z. Rothkopf, "Criteria for the acceptance of self-instructional programs," in *Improving the Efficiency and Quality of Learning* (A. E. Traxler, editor). Washington, D.C., American Council on Education, 1962.

Experimentation and planning for school use.—Since programed instruction represents a new and thus far largely experimental resource for education, schools need to experiment with it and to plan for its use. Experimental tryout in schools of both locally and commercially developed programs is strongly encouraged, and it is suggested that wide-scale adoption await the completion of such experimental tryouts. Because a particular advantage of programed instruction is that it permits the able student to proceed at an accelerated rate through basic course material and thereby to qualify sooner for advanced instruction, schools need to plan the adaptation of their curriculums to accommodate different rates of learning.

Perfecting programs through tryout and revision.—Programed instruction affords educators outstanding opportunities for perfecting instructional sequences by utilizing records of students' responses to preliminary forms of a program. These records provide a basis for successively revising and perfecting the instructional sequence. The development cost for incorporating the results of tryouts and revisions in the program can be prorated over a large number of students since the perfected programs can be used over and over again. Thus more research and development effort can be justified for programed instruction than for nonreproducible modes of instruction.

Tests of program effectiveness.—The value of a method of programed instruction cannot be tested in the abstract. An experimental tryout or field test of a program may provide an evaluation of that particular program, but it will not provide proof or disproof of the value of the general method. Experimentation thus far supports the expectation that good programs, carefully developed, *can* significantly improve both the quality and the economy of instruction. Whether any particular program *will* do so is another question. Programs may be offered for sale that will fall short of the potential value of programed instruction because they have not been carefully developed through procedures that include repeated tryouts and revisions.

"Teaching machines."—Some programs require a machine for their presentation. The variety and range of types of teaching machines continue to increase, with little standardization. Thus, in the evaluation of teaching machines, a continuing necessity is to determine the number and quality of programs available for each type of machine. Potential purchasers of a machine are well advised to seek reliable information on how extensively it has been used in schools, what maintenance problems have been encountered, and the extent to which parts and service are locally available. Several dozen different machines, differing widely in cost and complexity, are described and illustrated in a recent report prepared by Finn and Perrin.[6]

Inspection of programs.—It is assumed that a potential purchaser of a program will inspect the subject-matter content of the program at least as carefully as he would that of a textbook. It would be a mistake, however, to use such inspection as the sole means for estimating how effective a program will be. It is to be stressed that a better basis for evaluating effectiveness may be obtained through a tryout, using a sample of students representative of the population of intended users. The potential purchaser is encouraged to ask questions of the program's producer as a further basis for selecting programed materials. Three main kinds of relevant questions concern—

1. The source of program content, including authors and curriculum advisers.
2. Program tryout and revision.
3. Results of field tests to measure achievement produced by the program's use in schools under specified conditions.

Types of programs.—A number of types of programs are being produced. Although thus far these have tended to cluster around two or three main types, new variations or mixtures are continually being introduced. There is little empirical basis as yet to favor one general type over another, although certain ones may eventually prove to be especially useful for particular educational purposes. At present the kinds of "external" criteria discussed below appear to be the best basis for evaluating a program.

Evaluation of programs by "external" criteria.—Evaluation by "external" criteria means finding out what a program itself contributes to an instructional goal in terms of gains in students' knowledge or proficiency. To do so, the evaluator must make provision for isolating the contribution made by the program from the contributions made by other factors, prior or concurrent. The guidelines recommended by the committee for evaluating a program's effectiveness are consistent with Rothkopf's emphasis on the use of external rather than internal criteria; this emphasis also reflects the basic position earlier advocated by Lumsdaine and Glaser:

> In the development of quality-control standards for programs, it is important to avoid the imposition of inflexible requirements which might inhibit creativity and experimental use of new techniques. It seems clear that standards for the adequacy of a program ought to be conceived primarily in terms of its effectiveness in attaining defined educational objectives, rather than

[6] J. D. Finn and D. G. Perrin. *Teaching Machines and Programmed Learning 1962: A Survey of the Industry.* Occasional Paper No. 3, National Education Association, Technological Development Project. Washington, D.C., the Association, 1961. $1.50.

by specifying the format, sequencing, or other aspects of the means whereby these ends are achieved.[7]

"Manuals" for programs.—In some respects self-instructional programs are similar to educational and psychological tests: they have important features that are not apparent on inspection, and some of their characteristics are revealed only through data obtained in actual use. It is a widely accepted practice for producers of tests to supply manuals containing information about the characteristics of the tests; similarly it appears desirable and feasible for producers of programs to supply manuals containing information relevant to the programs. Such a manual should indicate who is primarily responsible for content and programing, what is prerequisite to using the program, intended relation of the program to other forms of instruction, and recommendations for its use.

It is to be hoped that a manual, at least for a program of considerable scope, would furnish evidence on the

[7] Lumsdaine and Glaser, p. 566.

(*Continued on p. 39*)

CHANNELS OF COMMUNICATION

A monthly report by Seth Spaulding, chief, Research and Services Section, Educational Media Branch, Office of Education.

The interest in the use of instructional media, which has increased greatly over the past decade, has not been limited to the media themselves. For the purpose of identifying the most effective techniques of using these aids, educators have taken a comprehensive new look at the very structure of education. As a result of their studies and experiments, many changes have come about.

Certainly television, as it is being used in large-group instruction, is no longer an "aid" but a new method of instruction. Nor is the language laboratory merely an "aid": it now includes materials that are the very core of the language course. Research on programed instruction has demonstrated that, by taking an empirical approach to the development and testing of instructional materials, researchers and practitioners can create a wealth of resources of predictable effectiveness and efficiency far beyond anything we might have expected some years ago from the use of an "enrichment" film, record, or set of slides.

THE OFFICE of Education has long taken an active part in developments in the educational uses for the new media and in educational broadcasting; it has provided both information and advisory services. Since 1958, when title VII of the National Defense Education Act made substantial funds available, the Office has authorized 186 grants for research and experimentation on the use of such media as television, motion pictures, teaching machines, and language laboratories and has let 117 contracts for dissemination of information. Together these grants and contracts represent a commitment of over $14 million in Federal funds.

DR. LUMSDAINE'S article on these pages is the first of a series that will report on research and dissemination grants and contracts under the Office's media program. Dr. Lumsdaine cites two of the Office's publications on programed instruction, both for sale by the Government Printing Office. Another, an annotated list entitled *Research Grants and Contracts Involving Teaching Machines and Other Self-Instructional Media,* is available free from the Educational Media Branch of the Office, Washington 25, D.C.

THE EXHIBIT of programed instruction reported on page 7 of this issue is but one of a number of dissemination activities the Office will undertake this year.

AT ITS OCTOBER meeting, the Office of Education's advisory committee on the new media suggested that the time is ripe for evaluating accomplishments under the title VII program and for considering what steps to take next. It recommended—

1. Contracts for "verification research." The Office would convene panels of researchers and educators to study the results of projects to date and to identify the areas in which further study is needed, either because there are gaps or because results are conflicting or inconclusive.

2. Grants and contracts for programatic research, which has the advantage of providing researchers with the continuity they need for following up new leads. The committee suggested that the educational media program work with other research-grant programs in the Office to support this kind of research.

3. A "national training laboratory" and a guided "national observation tour." The laboratory would provide short briefing sessions for key administrators, teacher educators, and others, on materials, resources, and methods; the tour would provide an opportunity for lay educators to visit and study educational programs throughout the country that are effectively using such media as television, teaching machines, and language laboratories.

4. A national study, in cooperation with professional organizations, of the role of the new media in teacher education.

5. A major effort, in cooperation with persons in the various academic fields, to identify ways of providing more effective instructional materials—materials which apply the principles that research has found effective. The committee expressed disenchantment with the instructional programing now generally available over television; moreover, they said, many of the programs prepared for "teaching machines" are uninspired and based on antiquated curriculum concepts; and films are being produced which do not apply what we know about the effective use of this medium for instruction. They suggested the production of "yardsticks"—that is, model presentations using effective materials and empirically tested methods—to show how the new curriculum concepts can be presented through the various media.

Let the word go forth from this time and place, to friend and foe alike, that the torch has been passed to a new generation of Americans . . . unwilling to witness or permit the slow undoing of those human rights to which this Nation has always been committed, and to which we are committed today at home and around the world.—*President Kennedy*

Teaching about human rights

WILHELMINA HILL AND HOWARD C. CUMMINGS

WE WERE BORN, Vann Woodward says, with the word "equality" on our tongues. But in every generation since we first accepted the self-evident truth that all men are created equal, there have been some people for whom equality has been little more than a word on the tongue, who have been lipservers only to the American ideals of freedom and equality. There are some in this generation; how many there will be tomorrow depends on what our schools do today. They can do much, surely much more than many of them are now doing, to give greater meaning and reality to those ideals. Human Rights Day, December 10, and Human Rights Week, December 10–17, which we have been called on to commemorate, give the schools an opportunity to renew their efforts and to reexamine the heritage they must preserve for a new generation.

On December 10, 1948, when our Government joined with 47 other nations in the General Assembly of the United Nations in approving the Universal Declaration of Human Rights, we not only pledged our support for the rights included in the Declaration but reaffirmed our faith in our own Bill of Rights. But unlike the Bill of Rights, the Declaration has no legal force; it is, as the United Nations General Assembly has said, a common standard toward which all nations and all peoples everywhere can work. It does, however, have moral and political influence.

The moral and political force of the Declaration is undeniable; in the 14 years since it was adopted it has influenced the constitutions of Costa Rica, El Salvador, Haiti, Indonesia, Jordan, and Syria, and national legislation in Canada, the Federal Republic of Germany, Ecuador, Thailand, and other countries. And it has also influenced governments to change peoples' lives. For example, in 1946, when the Commission of Human Rights was established, women had political rights in only about half the countries of the world; now they have such rights in more than 90.

In our own country presidential orders have abolished segregation in the armed forces; some States and local communities have barred discrimination on the job, in public housing, and in public transportation. Some professional, business, and labor groups, college fraternities, religious and fraternal orders have abolished religious and racial bars to membership.

Much, however, remains to be done: so far no nation has been able to secure for its citizens all the rights covered in the Declaration, and in some nations all or most of them are still a goal. In some countries men, women, and children are still in slavery; in others polygamy is still practiced; and in many countries millions of children have no opportunity to get even an elementary education and face a life of illiteracy. In this country, too, much remains to be done as any American can see from almost any daily newspaper if not from incidents in his own school or community. Much will remain undone unless the schools take a hand, for only through education can the Universal Declaration be made a living document.

Only through education can every citizen learn that individual moral obligation goes beyond Government decree or legal force in extending human rights.

The schools can commemorate Human Rights Day and Week without sacrificing an hour of educational program time, for commemoration can be made a part of the program, a stimulating and inspiring experience if teachers and administrators believe the effort worthwhile. Furthermore every pupil from kindergarten on can learn from and contribute to the observance.

ALL PUPILS should understand why the day is important to us as Americans: that in commemorating it we reaffirm our faith in democracy, renew our determination to form a more perfect union, and join other nations in working for a better world. Pupils in the upper elementary and secondary grades should learn how the U.S. Bill of Rights has affected their own lives and what the Declaration can mean to them. And they should learn how their lives are affected by the denial of rights to people in other nations, and the ignorance, illiteracy, poverty, and suffering which flow from the denial of these rights.

The youngest children in school are not too young to learn something about human rights. If they have not learned at home they soon learn at school, at first informally or perhaps unconsciously, that they have certain rights, that they are entitled to respect. If their teachers treat them with respect and never subject them to indignities or ridicule, listen attentively to their questions and answer them seriously, give them responsibilities and make them understand what it means to their classmates when they fail in a trust—pupils soon acquire self-respect, the basis of respect for others and for others' rights.

Small children can also learn about human rights in a more direct way. Teachers will, of course, understand the need to concentrate on only a few rights that are closely related to things in children's lives and interests. Children can understand the right to own property—for example, their right to a desk and their right to fair and equal treatment. Almost daily, teachers have opportunities to explain human rights in such situations as these: when two children demand to lead a game or a contest; when children vote on plans for a class trip; when one child disturbs the work of others; when National and State holidays such as Washington's or Lincoln's birthday come along.

Second- and third-grade children are interested in many things that are useful in teaching them about their own and others' rights. They are, for instance, interested in stories of our heroes, of life in early America, of the life of children in other lands. They can easily understand what education means when they hear of children who have no schools, who never learn to read even a comic book or to write a simple letter to a friend. They can understand the right to dress as they like and to choose their friends. They can understand the right to equal protection of the law by observing or checking with the policeman on the corner or the school traffic director.

Small children can act out some of the ideas of the Declaration and show how they apply to their own lives; they can tell stories about people in other lands or in this country, the Pilgrims for instance; and they can learn our national songs. With the teachers' help they can make posters.

Teachers can tell them about the Declaration of the Rights of the Child, which the UN General Assembly adopted in 1959.

THERE ARE innumerable things that upper elementary and secondary grades can do to commemorate Human Rights Day and Week. What they do, what pupils study, what articles are emphasized, what special programs are put on—these are decisions for teachers and administrators to make; they know the ages and background of their pupils, their interests and needs. They plan with the pupils. Here are a few suggestions.

- Copies of the Universal Declaration of Human Rights and the U.S. Bill of Rights can be exhibited on the school bulletin board.
- Students can make posters listing the great documents

Dr. Hill is specialist for social science in the Elementary Schools Section of the Office of Education. She has written many articles, Office of Education bulletins, yearbook chapters, and books on education for children. She has also been a professor of social sciences at the University of Denver and has served as an adviser to the Japanese Ministry of Education.

Mr. Cummings is specialist for social studies and geography in the Secondary Schools Section of the Office of Education. He has been president of the National Council for the Social Studies, has written several Office of Education publications, and is editor of the yearbook, Science and the Social Studies.

Tamar Liebes, a 16-year-old schoolgirl from Jerusalem, Israel, tells children of the lower school, Greenwich Academy, Greenwich, Conn., about her homeland. One of the children locates Israel on a world globe.

of freedom with dates: The Magna Carta, the Declaration of Independence, the Constitution of the United States, the Emancipation Proclamation, the Atlantic Charter, and the Declaration of Human Rights.

- The school librarian can arrange, with the help of students and teachers, a display of books, including histories, biographies of men who have helped make freedom possible; some of the books can be open at great documents; students' and printed posters can be made part of the display.

- A special assembly program can be organized in a number of ways; as a town meeting, an open forum, a program like "Meet the Press" or "Open End" with either a student or a community leader serving as moderator. Or it might be a roundtable discussion between students or between students and teachers. No matter how the program is organized it should be planned around one or two themes; for example, how are the principles of human rights observed in our school? in our town? Do students believe in these rights? and practice them? The assembly can be preceded or followed by a classroom discussion of these questions and others that these bring up; for example, what rights do students find it hardest to practice?

- Speech or other extracurricular clubs can hold public discussions on one of these questions: Why do people interpret rights differently? Why do governments interpret them differently? What events in the decades preceding 1948 led to the Universal Declaration?

- English and social studies classes can arrange table exhibits for the school library or their classroom, including pictures, cartoons, newspaper clippings, and books. They can include volumes of poetry, plays, history, biography, and fiction which describe social progress or the suffering caused by the denial of rights or by political, religious, and racial oppression.

- Pupils in the upper grades can make team reports on these subjects: (1) The meaning of rights to workers, the church, the schools; (2) a comparison of the Declaration with the U.S. Bill of Rights; a history of the origin of human rights; (3) a series of profiles of men of different nationalities who have contributed to human rights.

- Pupils at different grade levels can make word booklets or scrap books of abstract and difficult words, including dictionary definitions and illustrations of their use in different contexts. They could include such words as ballot, bigotry, brainwashing, courage, declaration, democracy, dictator, discrimination, freedom, justice, passport, prejudice, race, refugee, slavery, tension, tyrant.

The first principle

The child shall enjoy all the rights set forth in this Declaration. All children, without any exception whatsoever, shall be entitled to these rights, without distinction or discrimination on account of race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status, whether of himself or of his family.—*The Declaration of the Rights of the Child*, unanimously adopted by the General Assembly of the United Nations, Nov. 20, 1959.

Tree of Rights made by sixth-grade children, New Haven, Conn. Its roots and twigs represent the many ethnic groups emerging from the trunk of humanity. A Right is inscribed on each leaf of the tree.—*Reprinted with permission from the New Haven Register.*

- Drama clubs can present pageants or scenes dramatizing the articles that cover personal, social, and other rights applicable to pupils; they can ask English and social studies classes to cooperate with them in dramatizing events in the history of freedom and present a series of "You were there" programs for pupils in the lower grades.

- Both clubs and classes can present tableaus in which a student narrates the story of the development of rights and pupils represent the articles; they can act out such scenes as those showing trial by jury, labor and management in negotiation, and citizens in voting booths.

- High school English classes can rewrite the articles of the Universal Declaration in simple language for children in the lower grades.

MOST if not all of these suggestions have been used by schools in the United States or foreign countries. Many schools have extended their studies beyond Human Rights Week. A girls' secondary school in Ecuador conducted a 2-year project on the rights of women, including the place of women in the family and cultural life of the country, their economic and legal status, and their participation in international organizations.

In a secondary school in Sweden classes in history and social science also concentrated on the rights of women in their study of the Declaration. Teachers of Swedish, geography, and religion cooperated with them. During their study the boys and girls saw films, heard lectures on other countries, visited offices and factories, and interviewed business managers and State and local officials. Whenever the opportunity arose their teachers pointed out problems of race and slavery and reviewed the articles on the dignity of man. Teachers reported that students were uninterested in women's rights until they got down to practical questions like equal pay for equal work or equal opportunity for education, careers, and employment.

In a Hamburg school a French class of girls aged 16 and 17 formed a group to study problems of religious and racial discrimination. As one part of their study they read and discussed extracts from *Mein Kampf* and the *Diary of Anne Frank,* and articles from bulletins published by the German section of the International Congress of Christians and Jews.

Pupils in three Norwegian schools studied refugee problems, which result from the denial of human rights and which can be settled only by international cooperation.

These are only a small sample of the many things pupils all over the world are doing in their studies of human rights.

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GEORGE W. MCCOWN

U.S. foreign service dependents schools

THERE ARE 200 schools in Latin America, Asia, Africa, and the Far East organized and operated by employees of U.S. Government agencies, such as the U.S. Information Agency, the Agency for International Development (AID), and U.S. embassies and legations, serving abroad. The U.S. Government does not provide schools for the children of overseas civilian employees as it does for the children of members of the Armed Forces,[1] though it does make tuition grants under certain conditions. Employees themselves organize and operate schools for their dependent children. The major purpose of the schools is to prepare children to reenter schools in the States when they return. But in many areas these schools are also goodwill ambassadors.

Dr. McCown is a program specialist in the Technical Assistance Branch of the Bureau of International Education. He has been a high school teacher and principal, a superintendent of schools, a staff member of the South Carolina State Department of Education, and an education analyst for the District of Columbia Committee of the U.S. House of Representatives. Since coming to the Office of Education in 1960 he has worked closely with the Department of State in recruiting teachers for technical assistance programs in Southeast Asia.

The pattern of organization and administration is similar in most of the 200 overseas dependents schools. A group of U.S. Government employees at a foreign post decide to organize a school. They form a nonprofit organization, draw up a constitution, elect or appoint a school board, and apply for a charter from the host country. The school board determines the grades to be taught, rents a building, buys or builds school furniture and equipment, hires teachers—often employees' wives who have taught in the States—makes up a budget, sets a tuition fee, and applies to the Department of State through the U.S. embassy for tuition grants for each child the school will enroll. As the school expands, possibly by admitting children of U.S. businessmen in the area, other foreign nationals, and citizens of the host country (all of whom pay the tuition fee), it becomes necessary to expand facilities. Expansion often requires the purchase or lease of land and lease or construction of school buildings.

Schools range in size from one-room schools with 8 to 10 pupils in the elementary grades to schools with separate buildings and 100 full-time teachers for 1,800 students in all grades (K–12). Small elementary schools usually follow the Calvert System of instruction—supervised correspondence courses for a few pupils in grades 1 to 8. Larger elementary schools use the U.S. classroom system; most have a teacher for each grade or every two grades, depending on the number of pupils. Small high schools use correspondence courses under the supervision of a teacher. Larger high schools are similar to high schools in the States, though most of them offer only a college preparatory curriculum. Some of the best known schools are in Guatemala City, Teheran, Tokyo, and Pasay City (the Philippines). The largest—a complete school system—is the American School in Taiwan.[2]

The American-Nicaraguan School at Managua, for example, was founded in 1944 by U.S. citizens residing in the city. Its initial enrollment was 26 students, all children of U.S. citizens. In April of this year it had 487 pupils, about one-third of them the children of U.S. citizens. It is controlled by a five-member board of three U.S. citizens and two Nicaraguans. It offers instruction from kindergarten through grade 12. Instruction is in English, though Spanish is taught in every grade above the first.

Many of the overseas dependents schools have increased in size many times. Starting with 10 to 25 pupils, they now have 100, 250, or more pupils—with more expansion in sight. Many of them lack adequate quarters, supplies, and equipment, including laboratories and libraries. Experienced teachers are not available in many places. Recruiting from the

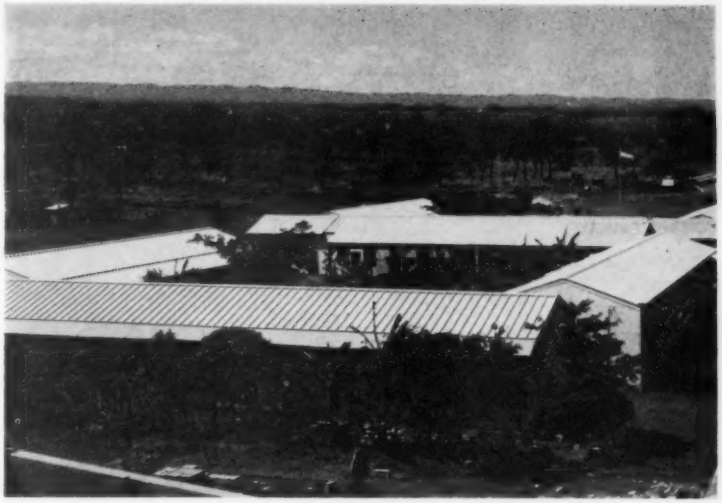
[1] In certain areas children of overseas civilian employees attend military dependents schools on a space-available basis.

[2] Some overseas Federal employees send their children to such well-known international schools as the International School of Geneva and the church-sponsored schools at Kodaikanal and Woodstock in India.

States is expensive. Many schools would be in trouble except for the help the Congress has made available to them through the "Act for International Development of 1961" (Public Law 87–195).

The purpose of the act is to "promote the foreign policy, security, and general welfare of the United States by assisting peoples of the world in their efforts toward economic development and internal and external security, and for other purposes." Sec. 636(d) of the law authorizes the use of $1.5 million of the funds available under the act for use in "any fiscal year to provide assistance, on such terms and conditions as are deemed appropriate, to schools established, or to be established, outside the United States in providing for the education of dependents of personnel carrying out activities authorized by this Act and dependents of United States Government personnel." By including aid to the overseas dependents schools in the act, the Congress recognized the importance of these schools to foreign service employees and to the foreign policy of the United States.

In December 1961, AID, which is administering the act, sent a questionnaire to the schools to determine their needs, both immediate and long-range. By October 1, 75 schools had sent in requests for grants totaling more than twice the amount of funds available. The chief problem, so far, in processing requests is to get the proper supporting evidence of need and to determine which grants, or parts of grants, should receive priority. Schools requesting aid under P.L. 87–195 must furnish information on background and history, legal status, land and physical facilities, faculty, curriculum, methods of financing, admissions requirements, boarding facilities, and projected enrollments. Replies to questionnaires indicate that schools need help with almost every element of a school. They are asking for help with revising and improving curriculums, selecting textbooks and reference books, and planning buildings as well as financial aid for building and equipping schools. They are also asking for advice on school administration and information on regional accrediting agencies.



The American-Nicaraguan School at Managua, founded in 1944, enrolled 487 pupils in school year 1961–62, only about one-third of whom were the children of U.S. citizens. The upper picture is of the new elementary school; the lower, of a classroom in the school.

Office of Education specialists, particularly those in the Bureau of International Education, have assisted AID in the evaluation of requests.

The school at Managua, for instance, has requested $200,884 to pay the salaries of more teachers and administrative employees; to buy equipment for commercial courses, the cafeteria, and the school office; and to build an auditorium and a gymnasium. The American School at Khartoum was granted $18,920 to help it add grade 9 to its grade 1–8 program. The American School of Tegucigalpa, Honduras, was granted

The American School in Tehran, shown here from the air, was founded in 1954. In the spring of 1961 it had an enrollment of 760 pupils in grades 1 through 9, all children of U.S. citizens.

funds for school supplies and equipment. The school at Alemaya, Ethiopia, founded by employees of an Oklahoma State University contract team, was granted $10,000 for constructing a one-room, one-teacher school. The Imperial Ethiopian College of Agriculture and Mechanical Arts has made land available to the school and has loaned it a room in the college until a separate building is completed.

AID is now considering a request for a secondary boarding school to serve the children of U.S. Government employees in six East African countries—Ethiopia, Kenya, Somali, Sudan, Tanganyika, and Uganda. A survey team, operating from Addis Ababa, will evaluate the request firsthand. It will look into the need for a school, possible location, whom the school should enroll, the cost of establishing and operating a school, and related matters. The Office of Education may have representatives on the team.

The American Cooperative School in Monrovia . . .
. . . the story of an overseas dependents school

REPRESENTATIVES of each U.S. Government agency with an operation in Liberia met in August 1960 to plan a school for their dependent children. They formed the American Cooperative Education Association and, with the permission of the Secretary of State of the Republic of Liberia, opened the American Cooperative School in Monrovia in October.

The school has an elected five-member board. It offers instruction in grades 1 through 9. The first eight grades follow the Calvert System; grade 9, the University of Nebraska system. Tuition is $400. In the spring of this year the school had 62 elementary school children (17 secondary school students were studying abroad).

The school is housed in inadequate quarters, in space loaned by AID. Its most immediate need is for more space. A larger school will be able to take in children from the U.S. business community, other foreign nations, and the host country. Liberia granted permission for the construction of the school with the understanding that qualified Liberian children could attend.

By September 1963 the school expects 250 pupils: 150 children of U.S. Government employees and 100 children from the international community and Liberia. There will probably be about 100 secondary school students in 1963 as well, half of them the children of U.S. foreign service officials.

In addition to being housed in borrowed quarters, the school lacks other physical facilities. The playground is small. School equipment, materials, and supplies do not meet minimum standards for U.S. schools. It has one teaching principal and four classroom teachers (wives of employees). Each has taught in the States and holds a teacher's certificate. The school needs a new school building for 250 elementary pupils with modern equipment on a 10-acre tract suitable for recreation. It will have to recruit additional faculty members from the States.

The board applied for help under P.L. 87–195, and AID has recently approved a grant of $195,000 to "construct and equip a new building and otherwise improve the school curriculum."

RICHARD L. DARLING

School library supervision in State and local school systems

MANY SCHOOL SYSTEMS have evidence that school libraries give superior service when they are provided with supervision. Studies conducted in the Northwestern States by the PNLA Library Development Project,[1] to give one example, report that the performance of libraries under the direction of school library supervisors is, with few exceptions, superior to that of nonsupervised school libraries. Many educational and library organizations also recognize the importance of supervision. The Council of Chief State School Officers, in a recent policy statement, emphasizes the importance of State supervision of school libraries and recommends that "The State department of education should provide competent professional school library supervisory personnel sufficient in number to meet the needs of the State department's program of service to school libraries." [2]

More than half of the State departments of education and many local school systems employ library supervisors. Though the work at the two levels differs in some respects—for one thing, the local supervisor has more administrative duties—supervisors at both levels have equal responsibility for the success of the most important work they perform—that of leadership. The success of supervision depends more on the way a supervisor exerts leadership than it does on the way he performs his other duties. A supervisor must have the knowledge that wins the confidence of coworkers, the vision and imagination to create a satisfactory philosophy of school library service, and the practical ability to carry out an effective library program.

Dr. Darling, school library specialist in the Library Services Branch, came to the Office of Education from Livonia, Mich., where he was coordinator of library services in the Livonia Public Schools. Earlier he taught library science at Montana State University and served as a consultant on school libraries for the Bureau of Educational Research and Services of the University.

To perform his work, the school library supervisor needs special education, special experience, and special personal characteristics. Ideally, he has a graduate degree in library science and advanced work in curriculum development and educational administration and supervision. He is familiar with newer media of instruction as well as with the materials traditionally associated with the library. His experience as a school librarian and as a classroom teacher gives him a broad understanding of instructional materials and their use. As a person he is energetic, enthusiastic, patient, poised, friendly, and intuitive. Because a large part of his job is to convince others of the importance of good school library service to the education of children, his personal characteristics are no less important than his education and experience. He must be able to present and defend his program. But he must also be able to understand those not yet convinced of the value of school library service.[3]

State school library supervisors

The responsibilities of State departments of education toward school libraries fall into six broad categories:

1. Certification of school librarians.
2. Standards for school librarians.
3. Supervision of school libraries.
4. Cooperation for school libraries.
5. Statistics and research on school libraries.
6. Information on school libraries.[4]

States employing school library supervisors fulfill these responsibilities to a greater degree than other States. In

[1] Pacific Northwest Library Association, Library Development Project Reports, *Volume II: Elementary and Secondary School Libraries of the Pacific Northwest*, pp. 66–67, 207–247. Seattle, University of Washington Press, 1960.

[2] Council of Chief State School Officers, *Responsibilities of State Departments of Education for School Library Services: A Policy Statement*, p. 9. Washington, The Council, 1961.

[3] For a description in detail of the qualifications of a school library supervisor, see pp. 37–46 of *Standards for School Library Programs*, prepared by the American Association of School Librarians and published by the American Library Association (1960).

[4] Mary Helen Mahar, *State Department of Education Responsibilities for School Libraries*, p. 19. Washington, U.S. Department of Health, Education, and Welfare, Office of Education, 1960.

fulfilling these functions, State department supervisors of school libraries work with other State supervisors, administrators, teachers, librarians, and the general public.

State school library supervisors accomplish some of their most effective work within the State department of education. Much of the understanding of school library service throughout a State depends on its interpretation by State school library supervisors to other members of the State education department. To impart understanding, supervisors must cooperate with other staff members in developing curriculum bulletins, formulating research, reviewing school-plant plans, and providing information on the relation of the school library to other programs of the State department of education. Since the library is a general service to curriculum, supervisors work especially closely with those who have general responsibility for supervision of elementary or secondary curriculum. Library supervisors should serve as members of curriculum committees organized by the State superintendent or as a consultant to those committees since they are responsible for representing the school library in the building of curriculums.

Though the setting of standards is ultimately his responsibility, the State superintendent expects his school library supervisors to advise and assist him in determining standards for the school library. Supervisors should assist their superintendents in this work since it is their job to interpret standards to local school systems and to evaluate local efforts to meet them. Supervisors must bring to the creation of standards broad understanding of their States, their needs, and the rate at which progress can be made. In addition, supervisors must interpret other State regulations applying to school libraries and librarians, such as certification requirements, to the libraries under their charge.

Another job important to the library program that supervisors perform is the collecting and analyzing of data on the State's school libraries. Only through such information can supervisors evaluate the status of programs and outline future programs. The information they collect is necessary in setting standards and in providing yardsticks to the schools with which to measure advancement.

The duties of supervisors also include working with other State agencies concerned with school library development. Among such agencies are institutions of higher education having teacher and library education programs. State supervisors advise them on the needs of the profession, content in instructional programs for school libraries, and courses for teachers in the use of materials.

Supervisors may also have responsibility for encouraging library programs in special schools maintained by the State, such as those for deprived or handicapped children.

Though the availability of excellent booklists prepared by the American Library Association and other organizations makes it unnecessary for supervisors to prepare general lists, they must bring these lists to the attention of the schools and encourage their effective use. They may, however, prepare special lists, such as lists of materials dealing with the State or region. They should advise the schools of new professional publications on librarianship and alert them to innovations in library science.

Many librarians are eager to create effective school libraries, but need assistance. In local systems without school library supervision, of which there are many, State school library supervisors provide leadership. For this reason, much of their time goes to consultant work in local school systems and to inservice programs with school system or regional groups. Since most consultive visits are to school systems most in need of help, supervisors often have to provide on-the-job training to partially trained or inexperienced librarians.

Most school administrators are eager to provide good school library programs. State school library supervisors are responsible for discussing with school administrators school library functions, needs, and standards of excellence. In conferences with administrators, supervisors can interpret State and National school library standards and plan with them programs by which their schools can meet or exceed standards. A supervisor's explanation of purpose can make standards meaningful goals toward which schools can exert greater effort. The kind of support the school library receives depends on the understanding of administrators.

Even experienced librarians may need guidance in achieving quality library service. Supervisors can help them plan improvement in library collections and services and outline long-range programs for school library development. They can suggest plans that include the faculty and administration of a school system in the library program, and can analyze routine operations to help the librarian minimize routine tasks and gain, thereby, more time for services.

Not the least important guidance State school library supervisors can provide local school systems is counsel on library needs when new buildings or additions to old buildings are being planned. By identifying the functions of a school library, supervisors can point out the space and equipment needs of the library to administrators and architects and thus help them design effective library quarters. Despite many publications on the subject of school buildings, architects and administrators welcome professional

guidance in planning so that schools can have libraries suitable to their purpose.

State school library supervisors must reach classroom teachers as well as administrators and librarians, and they most readily reach them through professional organizations for teachers, workshops for teachers and librarians, and published articles on school library service. Supervisors should take every opportunity to interpret the school library program to teachers and to assist them in improving their teaching through the use of library materials and services.

Ultimately the success of a State's school library program depends on the appreciation and support of the public. For this reason, part of a supervisor's job is to interpret school library service to the lay public. This means interpreting the program to parent-teacher associations, school board groups, women's clubs, and other organizations interested in the education of children.

Often supervisors win valuable aid in their efforts by working through librarian professional associations. The probability of acceptance of particular State school library development plans will be far greater if the organized library profession of the State has taken part in the planning.

State school library supervisors are fortunate if they can turn to school district library supervisors for aid and support. Local school library supervisors are leaders in the extension of school library services, acting as counterparts of State supervisors on their own level. State school library supervisors should encourage every district having a sufficient number of schools to justify an appointment to employ a library supervisor.

Local school library supervisors

Local school library supervisors are members of the administrative staff of the school district employing them. The chief supervisor of a system usually reports to the system's director of instruction. Though the qualifications of local school library supervisors do not differ from those of State supervisors, many of their duties do. They must, for instance, recruit librarians, set qualifications for applicants, interview candidates, and meet with other employees of the school system to determine final selections. They must also evaluate members of their staffs and report to their superintendents with recommendations on tenure, promotions, and changes in assignment.

The shortage of qualified school librarians creates problems for school systems working for improvement of library service. Supervisors can provide, through the central library office, services which enable the school to use the professional skills of a librarian to better advantage than in having him perform routine tasks. Supervisors can set up a central service for ordering, classifying, cataloging, and processing books and other instructional materials. By centralizing these procedures under a professional staff, supervisors provide valuable assistance to the school librarian and can, at the same time, achieve other desirable goals, such as standardization of cataloging and economy in expenditure.

Supervisors may also be responsible for the creation of a central professional library with a library staff to serve the board of education, the administrative staff, teachers, librarians, other professional members of the school system staff, and parents interested in information on education. The primary purpose of such a library is to provide data to faculty members or administrative committees planning improvement of instruction. Such a library also provides professional books and periodicals, curriculum guides, and materials to teachers. Such materials, provided through the school libraries, strengthen the services of an individual building library and help to inform librarians of the availability of such materials.

Local school library supervisors devote some of their time to interpreting the role of the library in the educational program to administrative and curriculum committees, where they work with principals and instructional supervisors as consultants on instructional materials and their use in the curriculum. School library supervisors may serve as active members of some committees and as temporary consultants on others. They also work with principals as consultants on school library programs in the individual schools, since principals have the administrative responsibility for the libraries in their buildings.

Supervisors should serve on all planning committees drawing up specifications for new buildings. They should draft specifications for school libraries and meet with architects planning new schools; they should also outline specifications for furnishings and equipment to guide the business department in its purchases to assure that well-planned, well-equipped libraries result.

Library supervisors should provide consultive service in the selection and use of books and other materials, and work on selection with the librarians from the schools in the system. They must bring to this service a broad knowledge of the curriculum and of the needs of the schools for particular types of materials. Librarians need help with special procedures in the system and with adopting innovations in the profession in the use of newer media of instruction. Supervisors should hold regular meetings of librarians to discuss with them the programs of their libraries, programs for which they need assistance, and new policies. Supervisors should encourage librarians to keep abreast of current development in education through professional journals and other publications. If librarians

require further professional education, supervisors can encourage them to obtain it as quickly as possible and advise them on desirable courses and institutions. Supervisors can encourage librarians to attend professional meetings by requesting travel funds for them and informing them of meetings and programs of interest or value. They can encourage librarians to become members of professional organizations by providing information on the functions and values of each association.

Supervisors should attend meetings, both National and State, to represent their school districts and to bring back useful information to the district.

Most of a library supervisor's inservice training work is with teachers not with librarians. Though supervisors share the responsibility for helping teachers with building librarians, supervisors should lead the way in planning activities. They should, for instance, plan workshops or similar programs to acquaint teachers with library materials and methods of using them in instruction. A well-planned workshop provides opportunities to introduce newer instructional materials of all types to teachers and to increase their knowledge of older ones.

Budget planning, though primarily an administrative job, provides local school library supervisors with additional opportunities for acquainting principals and business department officials with the needs of the libraries and to set standards for expenditures and for quantities of material. Whether library supervisors administer library budgets directly, or whether a budget is assigned to each school, supervisors and principals should work together to determine the amount each library needs. With either system of budget allocation, library supervisors can work effectively. If budgets are assigned to supervisors, they need the support of their principals in obtaining budget approval. If the budget is assigned to the building, a principal welcomes the support of his library supervisor in justifying requests.

Coordinating the work of school librarians is another responsibility of school library supervisors. Since teaching the skills of library use and of research should begin in the kindergarten and continue throughout school years, supervisors should coordinate the instructional program and help librarians build functional programs at all grade levels.

THE basic role of school library supervisors is to provide leadership in the development and improvement of school libraries. They must use imagination and insight in handling the problems of school librarianship. Through counseling, assistance, and setting a good example, school library supervisors can inspire fellow workers to achieve the kind of school library service the best education of our children requires.

Problems in planning

PROBLEMS in planning school facilities are, at best, complex and exist to some degree in virtually every school district in this country, but in metropolitan central cities they are becoming increasingly severe. These problems, their implications, and the effects they may have on immediate and long-range planning are of utmost importance not only to school planning officials but to all other officials responsible for city planning. If the problems are not solved satisfactorily, the schools cannot offer the educational programs which the pupils need and to which they are entitled, and the communities these schools serve will be adversely affected. But these problems can be solved and solved more readily if the officials of all planning groups concerned recognize their interdependence and coordinate their efforts.

To assist city school officials in solving their problems in planning facilities, the School Housing Section of the Office of Education is conducting a study in which it is compiling, identifying, and describing the characteristic problems. As a first step toward this objective, the Section held a 2-day exploratory conference, June 14–15, at which school planning authorities representing 13 of the largest metropolitan cities in the country discussed problems of greatest concern to them.

After considering the various planning problems and subproblems in their districts, the conferees identified nine major problem areas as being characteristic: (1) Urban renewal; (2) expressway development; (3) zoning regulations; (4) building codes; (5) construction costs and financing; (6) educational program planning; (7) population migration; (8) site problems; and (9) public relations problems.

These problems and their subproblems vary in intensity from district to district, but the consensus of the conferees was that each district represented was or had been to some extent affected by problems in all these areas. Some of the same subproblems were mentioned under several of the major areas; for instance, costs, financing, sites, and zoning regulations were all mentioned as subproblems relating to both urban renewal projects and expressway development. And some of the subproblems including those mentioned were important enough in their own right to be classified as major problem areas.

This list of problem areas makes it obvious that plan-

WILLIAM W. CHASE

school facilities in metropolitan centers

ning school facilities cannot be isolated from other urban planning problems. It is also a reminder that planning officials, including school officials, may, because of their own particular interests, overlook or disregard the overall planning functions. It follows then that cooperation between officials of all planning groups is essential. For example, complete cooperation between the school officials and urban renewal planners is imperative if a proposed renewal project and the school serving the area affected are to succeed.

Many communities are now providing an instrument for comprehensive citywide cooperation—the Community Renewal Program. It is, as William L. Slayton, Commissioner of the Urban Renewal Administration, says, an action-oriented program through which a city marshals its resources and works out a schedule for communitywide improvement. Although it was conceived as an instrument for identifying and scheduling renewal action, it is being used to make decisions on a broad front. Whether or not a city uses this particular instrument is not important, but it is important for a city to use a well-organized method of cooperative action among its various planning groups. Only through such a method can leaders in each group understand and sympathize with the planners affected by their plan.

One of the cities that has set up an excellent method of citywide cooperative planning is Oakland, California. There an official city-school coordinating council meets regularly to study all types of problems involving city and school activities. The Oakland City Council officially appoints three members and the Oakland School Board appoints three members to this council. The council, working closely with the Oakland City Council and the City Planning Commission, is constantly aware of the immediate and long-range goals of the entire city and as a result is better able to coordinate its planning.

Participants in the Office of Education conference discussed their problems area by area, considering the scope and urgency of solving each one but always searching for the relationship between them and their significance to planning school facilities. As they did so they came back repeatedly to the same conclusion: planning groups within a city must plan and act together to accomplish their ultimate goals.

Urban renewal

In metropolitan centers slums and other blighted areas, overcrowding, and sudden or drastic shifts in population may directly affect planning of school facilities. By the same token, the removal of blighted areas or other unsatisfactory conditions and the relief of overcrowding through urban renewal projects affect school planning in many ways. For instance, an urban renewal project may, by removing taxable property from the tax rolls, affect the financing of school building construction that the project itself has made necessary. Although the removal of the taxable property may be temporary, the lowering of a city's financial ability may seriously curtail school building construction at the time of its greatest need.

The problem for school planners is compounded because of the circumstances involved with the renewal project. First of all, the people residing in the project area must be relocated to permit clearance of the area. The pupils displaced by the project must be assigned to other schools which may be already crowded, thus causing an immediate need for additional building facilities. Then when the renewal area is redeveloped and families occupy the housing provided, an additional building may be needed in that or an adjacent area. The conferees emphasized that, in addition to the temporary financial burdens which were often imposed, their building and program planning problems were increased because of delays in renewal project schedules.

When Dr. Chase came to the Office in 1962 as specialist in school plant administration, Division of Elementary and Secondary Education, he brought with him a variety of educational experience. He had been consultant in planning school buildings at Ohio University, Athens; and director of the Division of Schoolhouse Planning, Indiana State Department of Education. In addition he has had experience in college administration and in international education.

Experience has shown that the tax value of redeveloped areas usually increases the total assessed valuation of the district. The financial problems arise, however, because the children must be housed and educated during the entire renewal program.

While such financial problems have occasionally disrupted or delayed the school construction program, city schools can anticipate some financial relief. Federal legislation authorizing urban renewal projects provides that the cost of building schools serving redeveloped areas may be treated as a part of a locality's share of the local cost of a project. As a general rule of thumb, the Federal Government will make available $2 for every $3 that a city invests in school construction to serve a project area. In some instances this amount may, however, be but a token of the total replacement cost since the Federal contribution is prorated on the basis of the percentage of schoolchildren living in the project area and attending that particular school. Furthermore, since these funds are paid to the city sponsoring the project as a part of the total share of the cost, school planners still must obtain, through regular channels, needed funds for school construction.

Expressway development

Expressway development projects, like urban renewal, create various kinds of problems which affect planning. The conferees pointed to a number of specific problems they face. An expressway may be so routed that it isolates and renders useless an established school site and building. Replacement of these facilities in an already congested area is usually costly in dollars and time. Limited access roads have, in several cities, permanently added to the cost of pupil transportation. A specific example of this exists in Columbus, Ohio, where a small segment of a residential area has been isolated between a river and a section of a limited access expressway. Since there are not enough pupils living in this small area to justify a separate school, the few pupils living there must be transported several extra miles daily to the school situated on the opposite side of the expressway.

In the cities where expressway developers and the school authorities have planned together, many of these problems have been satisfactorily resolved. In Los Angeles, California, expressway officials have, at the request of school authorities, provided overhead walkways for pupil traffic to the schools. In San Diego, California, and elsewhere expressway planners have reimbursed school districts for school lands taken for throughways and for expenditures needed to construct sound barriers between a school building and an adjacent highway.

Just as an expressway project may increase the financial burden of the urban school district, it may also reduce the district's financial ability. Valuable land and property are used for throughways, cloverleafs, ramps, overpasses, and underpasses and are therefore permanently removed from the tax rolls.

If the school officials and the expressway officials do not cooperate fully, much essential long-range planning will be futile. School officials must know where routes and route changes are planned if they are to project their building needs. Since school buildings must be properly located for most efficient use, school officials must have ample time to acquire sites; and since it sometimes takes from 2 to 4 years from the initial planning stages to a finished building program, they must have sufficient time and information to estimate and plan their future needs. Because the planners of schools and the planners of expressways both function in the public interest and have rights of eminent domain, questions of authority and control often arise between the two groups. Such questions are less likely to become divisive if the officials are used to working harmoniously together.

Zoning regulations

The efficiency and the effectiveness of many school buildings depend on the type of neighborhood or community in which they are located. The type of neighborhood, in turn, depends to a great extent upon the zoning regulations which determine whether it is strictly residential or a combination of commercial, industrial, and residential and whether limits are placed on the numbers of dwellings per city block and the numbers of family units within each dwelling. Local zoning ordinances can, if not wisely planned or if not modified to meet changing conditions, create many school facilities planning problems. It is true that the problems are not as serious as those in other areas, but the effects of adverse regulations, political expediencies, inconsistent policies, and the pressures of selfish interests are quickly and sometimes keenly felt.

In discussing this topic, the conferees recognized the importance of zoning but stressed that cooperative planning between city zoning boards and the school officials was imperative if many of their problems were to be avoided or at least minimized. Several of the conferees said that they were often called upon to recommend possible changes in zoning regulations and were thus able to effect desirable changes or to prepare adequately for potential problems. In Cleveland, Ohio, for example, a certain amount of space must be provided on a school site for off-street parking of automobiles. This requirement, in addition to providing a safety factor for traffic, helps school officials justify larger site purchases.

Building codes

The conferees were unanimous in their opinions that building codes generally are highly desirable and that many are essential to the safety and well being of the occupants of school buildings. They mentioned several instances in which building codes had been extremely useful in including safety factors in building plans that voters in their districts might not have otherwise supported. But they further pointed out that some requirements and circumstances work to the disadvantage of the school planners. Among them are the inconsistencies in and various interpretations of code requirements, excessive requirements, outdated codes, multiplicity of agencies enforcing codes, and pressures of political or vested interest groups who may cause codes to be established or revised indiscriminately. In a number of instances there are differences or discrepancies between local and State codes, and it is often difficult to determine the procedures and precedence between the two.

The interpretation of building codes as they affect new construction, older established buildings, and temporary portable buildings is of major concern to the conferees. While it is relatively simple to observe code requirements in new construction, it is often difficult to do so in the older buildings and in portable structures. Rapidly expanding enrollments force schools to use many of both the older and portable buildings, but the expense involved in complying with some of the building codes can be very high.

Construction costs and financing

The problems created by construction costs and financing regulations are becoming prevalent in the metropolitan areas. Fred F. Beach, Director, Educational Administration Branch, in the Office of Education, has recently discussed some of the reasons for the financial plight of big cities (see "State Aid—New Hope for City Schools," *School Life*, May 1962, p. 14–15).

Since the Second World War, he says, the financial status of cities has changed markedly: growth of suburbs, shifts in taxable wealth, and population migration are three of the factors that have put cities in a less favorable position in the States than they formerly were. High construction costs brought about by increasing costs of labor and materials and lower taxable valuation per pupil, together with constitutional and statutory provisions limiting taxing authority, create real dilemmas in metropolitan centers. In short, Dr. Beach says, "large cities are the cores of great economic centers which they cannot adequately tax."

The conferees agreed that the property tax, the main source of local revenue, is becoming less and less adequate as a measure of the wealth of cities and as a source of revenue. Per pupil costs are increasing at the same time that local taxable valuation per pupil is decreasing.

Educational program planning

Changing philosophies of education, new understanding of how children learn, and innovations such as team teaching and the use of educational television, recordings, and other electronic equipment, all involve changes in building design. In addition plans must provide for the special equipment, space, and staff required in special education programs for the physically and mentally handicapped, the gifted, slow learners, migrants, and others. Such provisions are becoming increasingly necessary as population becomes concentrated in large metropolitan centers—some schools report that a large percentage of all the pupils they enroll need such special services.

Many city schools are already limiting their educational programs because many of the buildings they are using are obsolete. Furthermore, some of their buildings, though structurally sound, cannot readily be remodeled to provide the space and facilities that current programs and practices require. Because the expense of replacing those buildings is prohibitive, the schools must adjust their programs to the buildings instead of to the needs of the pupils.

Population changes

Rapid shifts in population within cities and in and out migrations affect both educational programs and building needs. Planners must consider the numbers of people involved, their socio-economic backgrounds, and the eventual effects of changes on the schools, neighborhoods, and the city as a whole. Since the school is one tangible means by which a neighborhood gains stability, the planners have a responsibility for anticipating the needs of the people and providing for them insofar as possible.

Probably one of the most difficult tasks school authorities have is that of predicting future building needs on the basis of enrollment projections. A sudden industrial development in a community can cause serious overcrowding in school facilities. A difficulty encountered in this type of situation, according to several of the conferees, is that a new industry may cause enrollments to increase and additional facilities to be needed long before it is placed on the tax rolls and benefits from it may be gained. The reverse situation can have equally serious consequences to

the school district. If a large industry suddenly ceases its operations, a large segment of the workers it employed may move their families to other places of employment, leaving many of the educational facilities unused.

A third type of problem in this general area occurs annually in Houston, Texas. During the winter months the schools in Houston are utilized to capacity with children of permanent residents as well as the children of migratory workers. During the spring months the migratory workers take their children out of the schools so the entire families can follow crop planting, cultivating, and harvesting. This causes serious difficulties not only in planning educational programs but in planning buildings.

School sites

The conferees agreed that severe limitations are often imposed on them because of the scarcity of available land of adequate size, in the proper locations, and at prices the school district can afford. Some cities have had to pay high prices for school sites, sometimes as much as or more than they spend on the school building. Because of limited land space and high land costs planners of apartments and office buildings build upward rather than outward. While this has been somewhat contrary to accepted practice in planning buildings for elementary and secondary schools, some steps are being taken to break with the practice. The Board of Education of New York City, for example, has designed primary schools on the first and second floors of high-rise apartment buildings. When no longer needed for this purpose, these rooms can be converted to additional apartment or office space. This board is also designing a commercial high school in a multistory office building. The high school has the advantage of being located in a commercial atmosphere, and the rental of office space will eventually amortize the debt for the building.

School districts have the right of eminent domain, but they may hesitate to use it to obtain building sites because of the time and expense involved and the likelihood of creating hostile public opinion by court procedures in condemnation suits. Pressures of vested interest groups do at times encourage or force schools to acquire sites that are unsuitable in size, location, or accessibility to pupils. And sometimes planners run into complications because they must rebuild on sites already too small to accommodate the current educational program with little or no margin for expansion. Replacing a building on such a site demands a series of compromises and usually results in relocating the same outdated educational program in a new building.

Public relations problems

The conferees, after agreeing unanimously on the complexities of the public relations program, considered several means of reaching the public and the implications of each. They generally recognized that providing for public school facilities was a local obligation but that many metropolitan districts failed to give wholehearted support to their obligation, either because they did not understand many of the problems involved or did not appreciate the values of the educational program. These factors, coupled with the competition among local governmental units for income from the taxes and other sources, put additional burdens on authorities planning school facilities. Making these problems known to the community is, of course, part of the planning program.

AT THE CLOSE of the conference, each of the participants was able to identify more clearly the many problems affecting planning in his own district. Several had been able to resolve some phases of the major problems discussed but usually on an individual and trial-and-error basis. Although no united or coordinated efforts were made to exchange ideas on solutions to the problems during the conference, the conferees did recommend that each of the nine major areas should be studied by qualified individuals, research groups, or agencies and the results reported back to them. They requested specifically that the School Housing Section of the Office of Education serve as a clearinghouse for disseminating information from these and related studies. While these services are being provided on a limited basis at present, the Section plans to strengthen its school facilities clearinghouse as rapidly as the necessary staff and other resources can be made available.

The conferees also suggested that they organize themselves into a continuing study group to pursue their common problems. They felt that many of their problems in planning school facilities were seldom given sufficient attention by other professional groups. By forming such a group which would meet regularly, they might save much time and effort through united study. As a final order of business, the conferees agreed that they would meet again in 1963 at the Office of Education for a working session. At the request of the group, the School Housing Section agreed to provide the leadership necessary to coordinate activities of the group and to assist in any other way it could with the organization.

EDITOR'S NOTE.—*Dr. Chase is currently preparing a guide on the problems in planning metropolitan schools. When his study is completed copies will be made available to school and other city planning groups.*

AD Minutes Briefly noted--- for the busy School Administrator

Material for this department is prepared by the staff of the School Administration Branch, Division of State and Local School Systems

School buildings in the round are coming off the drawing boards. In San Leandro, Calif., a two-story circular unit houses the academic part of Pacific High School; in Fairbanks, Alaska, a circular elementary school building has a folded plate roof to provide more light; in Detroit, an elementary school has a circular center and 17 hexagon shaped classrooms; and in Montgomery County, Md., a circular elementary building will be constructed soon. Reported advantages of circular schools include better utilization of space, more program flexibility, and more efficient movement of pupil traffic.

Although Nebraska voters have approved 31 of 40 school bond proposals so far this year, they have rejected $7.1 million of a total issue of $14.6 million. The State department of education speculates that the increased rejections over previous years reflects, among other causes, growing taxpayer resistance to rising property taxes.

Federal financial support of local schools, according to Raymond Callahan of Washington University, St. Louis, Mo., should probably be regarded as a positive good rather than a necessary evil. Dr. Callahan, who recently completed a comprehensive historical study of the social forces that have influenced school administration, contends that professional autonomy for local school administrators is impossible because of the traditional pattern of financing schools largely through local property taxes. The supposition that local support and control of public schools prevent the tyranny of an all-powerful central government and provide for local initiative and experimentation is at least a legitimate subject of inquiry, according to Callahan. His findings and conclusions are elaborated in his book, *Education and the Cult of Efficiency,* published this month.

Looking for Leadership?, a manual produced by the Kansas Association of School Boards, describes a sequential 10-step procedure for selecting a chief school executive. The procedures begin with one for making a public announcement of the vacancy and end with one for informing all applicants of the selection. They were prepared, says the manual, in accord with ethical procedures, administrative convenience, and public relations considerations.

How large should a high school be for maximum economy and efficiency? C. B. Smith of Ohio State University has explored this problem by examining 21 factors related to cost and to program effectiveness in 3- and 4-year secondary schools using records on file at the Ohio State Department of Education. From his findings, Dr. Smith draws these conclusions: when all factors are considered, gains in both economy and educational opportunities are substantial up to enrollments of approximately 800; enrollments of 800 to 1,200 pupils are sufficiently large to support a comprehensive educational program economically and efficiently; when enrollment is over 1,200, "educational disadvantages are inescapable."

Most of Arkansas' 418 school districts are too small, the University of Arkansas says at the close of an intensive study, to correlate district size with student achievement, courses offered, specialized services, and financial support. A school district should have at least 1,600 pupils, the study concludes, if it is to provide a 12-grade program of high quality.

A massive long-range program of school building in Boston linked with urban renewal projects has been recommended by a Harvard School of Education survey team. It recommends the abandonment of 80 existing schools and construction of dozens of new schools and additions, including a 5,500 pupil high school and a 1,500 pupil trade school for the city.

San Francisco's culturally deprived pupils are getting more help through "compensatory education" programs. Nineteen experienced teachers in the school system assigned to the program will give special instruction in reading and the language arts to culturally deprived pupils. The city school board has added $100,000 to its 1962–63 school budget to support such programs in depressed neighborhoods. This effort is in addition to the School-Community Improvement Program sponsored by the Ford Foundation.

Iowa citizens approved 49 proposals for reorganizing districts during the 1961–62 school year. In that time, they reduced the number of schools by 159, to a total of 1,231. There will be 41 fewer high school districts in Iowa in 1962–63 as a result of the 49 reorganizations and voluntary discontinuance of such districts.

SCHOOL BONDS—

Sales, Interest Rates, et cetera

A monthly report by ELMER C. DEERING, *Office of Education specialist on the financing of school facilities.*

THE BEST TIME to hold a school bond election is the time when voters are most ready to give their approval, but such a time is not always possible to determine in advance. With the advantage of hindsight, however, we can find the times which in the past proved most auspicious and may even discover some guides for the future.

The following tabulation, showing the percentage of school bond issues approved by month, 1957 to 1961, says that January was the best time in 1957, June in 1958, October in 1959, June in 1960, and December in 1961 (the percentages were computed on the basis of dollar volume):

	1957	*1958*	*1959*	*1960*	*1961*	*Average*
January	90.9	76.0	73.4	90.2	63.1	78.3
February	72.1	69.8	80.0	83.6	75.5	76.2
March	65.4	69.7	79.4	84.3	70.0	74.4
April	87.9	68.7	84.1	82.7	58.3	77.1
May	75.1	69.7	78.2	66.7	66.2	71.4
June	76.1	92.4	72.0	91.5	75.3	85.3
July	56.4	43.8	45.2	85.5	66.7	62.2
August	90.5	83.8	66.7	88.0	61.9	79.5
September	73.9	71.4	67.1	75.9	65.1	70.6
October	73.0	81.4	85.6	74.1	75.2	78.2
November	63.8	83.8	36.5	86.4	72.6	63.9
December	72.6	80.4	78.8	76.4	79.1	77.7
Average	73.7	77.8	61.7	82.6	70.7	73.3

For the 5 years as a whole June was the best month, August second, and January only a fraction ahead of October. The worst times were July in both 1957 and 1958, November in 1959, May in 1960, and April in 1961; July was worst for the period as a whole.

This year in the November general election, according to reports received by the *Daily Bond Buyer*, school bond issues submitted to the voters totaled $293 million—14 percent of the $2 billion of municipal bonds submitted. In 1961 school bonds submitted in the general election totaled only $226 million but made up nearly 18 percent of the municipal bonds submitted.

A survey of municipal bond elections for the last 5 years shows that November is a more popular month for voting on municipal bonds than it is for school bonds alone. Of the $23.1 billion of municipal bonds voted on during that period, $9.9 billion, or 42.8 percent, were voted on in November; of the $9.1 billion of school bonds, only $2.4 billion, or 26.5 percent, were voted on in November.

November, though the second worst month for percentage approved, led both in the amount of school bonds voted on and in the amount approved:

Month	Submitted for vote, 1957–61		Approved, 1957–61	
	Amount	Percent of 5-year total	Amount	Percent of 5-year total
	Millions		*Millions*	
November	$2,411	26.5	$1,540	23.1
May	1,142	12.6	816	12.2
June	1,124	12.4	959	14.4
April	909	10.0	701	10.5
March	739	8.1	550	8.3
October	702	7.7	549	8.2
December	583	6.4	453	6.8
February	559	6.2	426	6.4
January	336	3.7	263	4.0
September	286	3.2	202	3.0
July	172	1.9	107	1.6
August	122	1.3	97	1.5
Total	9,085	100.0	6,663	100.0

THE AVERAGE NET INTEREST cost on school bonds declined for the third consecutive month in October 1962, to 3.01 percent, the lowest point in 6 months and the second lowest since May 1958 (*School Life*, June 1962, p. 25). More significant was the average of 3.15 percent on 28 sales of Baa bonds totaling $26 million. This was 19 basis points under the previous low, reached 40 months ago, in June 1959, and 8 basis points below the 1961–62 average for Aa bonds.

Average net interest cost of Moody-rated bonds sold on the primary market for public school purposes, October 1961–October 1962, by rating

Period	Aaa	Aa	A	Baa	Ba	All rated bonds
1959–60	3.26	3.63	3.77	4.21	4.55	3.84
1960–61	2.82	3.34	3.43	3.75	3.97	3.48
1961–62	2.84	3.23	3.19	3.52	3.93	3.27
1961:						
October	.....	3.39	3.29	3.70	4.17	3.45
November	.....	3.16	3.42	3.74	3.89	3.44
December	2.97	3.25	3.37	3.76	4.15	3.40
1962:						
January	3.02	3.13	3.21	3.54	.....	3.23
February	2.75	3.00	3.14	3.39	3.93	3.13
March	2.80	2.99	3.07	3.34	3.89	3.21
April	2.56	2.84	2.85	3.35	3.61	2.94
May	2.56	2.95	3.02	3.34	3.80	3.13
June	2.82	2.83	3.14	3.48	3.93	3.21
July	.....	3.15	3.13	3.61	4.02	3.22
August	.....	3.03	3.08	3.43	3.82	3.18
September	2.83	2.80	3.08	3.47	3.75	3.10
October	.....	2.75	2.95	3.15	3.84	3.01

Source: Sales reported by the Investment Bankers Association and THE DAILY BOND BUYER, which include about 75–80 percent of the total for public school purposes.

Statistic of the Month

Holding power of U.S. schools rises

Children are staying in school longer than ever before. As the table and chart show, the retention rate from the fifth grade through high school graduation has more than doubled in the past 30 years. The improvement is even greater between the fifth grade and the first year in college: about 34 percent of our former fifth graders now go on to college, compared to only 12 percent 30 years ago.

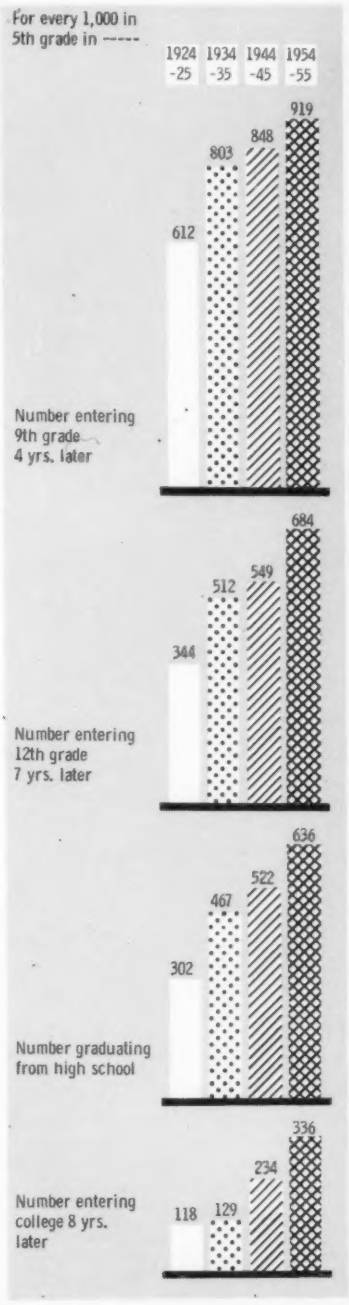
The Office of Education bases its retention tables on fifth-grade rather than first-grade enrollment because of the high rate of retardation in the early grades. Besides, compulsory attendance laws keep virtually all children in school at least until the fifth grade. The figures are based on enrollments in public elementary and secondary schools and include estimates for nonpublic schools. Rates for college enrollment include all students, both part-time and full-time, in degree-credit programs.—W. Vance Grant, educational statistician.

Estimated retention rate in U.S. schools (48 States and D. C.), public and nonpublic, from fifth grade through college entrance, 1924–32 to 1954–62

School year in which pupils entered 5th grade [1]	For every 1,000 pupils entering 5th grade in a specified year, this number—				
	Entered 6th grade 1 year later	Entered 7th grade 2 years later	Entered 8th grade 3 years later	Entered 9th grade 4 years later	Entered 10th grade 5 years later
1924–25	911	798	741	612	470
1926–27	919	824	754	677	552
1928–29	939	847	805	736	624
1930–31	943	872	824	770	652
1932–33	935	889	831	786	664
1934–35	953	892	842	803	711
1936–37	954	895	849	839	704
1938–39	955	908	853	796	655
1940–41	968	910	836	781	697
1942–43	954	909	847	807	713
1944–45	952	929	858	848	748
1946–47	954	945	919	872	775
1948–49	984	956	929	863	795
1950–51	981	968	921	886	809
1952–53	974	965	936	904	835
1954–55	980	979	948	919	855

School year in which pupils entered 5th grade [1]	Entered 11th grade 6 years later	Entered 12th grade 7 years later	Graduated from high school 7 years later (i.e., in the year shown)	Entered college 8 years later
1924–25	384	344	302 (in 1932)	118
1926–27	453	400	333 (in 1934)	129
1928–29	498	432	378 (in 1936)	137
1930–31	529	463	417 (in 1938)	148
1932–33	570	510	455 (in 1940)	160
1934–35	610	512	467 (n 1942)	129
1936–37	554	425	393 (in 1944)	121
1938–39	532	444	419 (in 1946)	[2]
1940–41	566	507	481 (in 1948)	[2]
1942–43	604	539	505 (in 1950)	205
1944–45	650	549	522 (in 1952)	234
1946–47	641	583	553 (in 1954)	283
1948–49	706	619	581 (in 1956)	301
1950–51	709	632	582 (in 1958)	308
1952–53	746	667	621 (in 1960)	[3] 328
1954–55	[3] 764	[3] 684	[3] 636 (in 1962)	[3] 336

[1] Fifth grade in 12-grade systems; 4th grade in 11-grade systems. [2] Lack of detailed information about students who were veterans prevents reliable calculation. [3] Subject to slight revision when final data become available.



Notes on the Notable

Teacher development program

More than 4,500 educators from 83 countries have taken part in the international teacher development program since 1944. This year 479 educators from 66 countries are on programs arranged by the International Teacher Development Section of the Bureau of International Education. About 200 of them are on "regular" grants—180-day programs of study; the others are on short-term programs, lasting from 30 to 60 days for the most part.

Participants in regular programs began seminars in September that will continue until mid-January. They are studying, by groups, at Harvard University, Rutgers-The State University of New Jersey, Ohio University, San Francisco State College, University of Michigan, University of Oklahoma, University of Texas, University of Utah, University of Wisconsin, and Western Michigan University. Seminars are in the teaching of English as a second language, elementary education, secondary education, American civilization, and administration and supervision.

After an educational tour through the United States during the Christmas season, participants will go to State departments of education for community programs, including visits to schools throughout the States. In mid-February they will return to Washington for an evaluation of their programs with Office specialists.

The International Teacher Development Section administers the teacher development program in cooperation with the Bureau of Educational and Cultural Affairs, Department of State.

Exchange program in demand

Applications far outnumber the positions that will probably be available in 1963–64 under the teacher exchange and summer seminar programs sponsored by the International Educational Exchange Program. The Teacher Exchange Section of the Bureau of International Education reports that 1,875 teachers have applied for about 300 teaching positions abroad for school year 1963–64 or to take part in nine overseas seminars for 15 to 30 persons each next summer. Of the applications received, 967 are for teaching positions; 1,073 for grants to attend seminars; and 161 for both. The largest number of applications for teaching positions in any one country is 330 for the United Kingdom (about 75 positions); the largest number of applications for any one seminar is 281 for teachers of Spanish in Spain (30 positions).

The competition for 1963 teacher exchange and summer seminar programs is now closed with the exception of a few positions in a few countries for teachers of English familiar with French and teachers of science and mathematics.

Summer seminars will be held in Brazil, Colombia, France (two), Germany, Greece, India, Italy, and Spain.

Workshop for Latin Americans

The 12th Puerto Rican Workshop for teachers and school administrators from Latin America sponsored by the Office of Education opened on October 9 at the University of Puerto Rico. After the 64 participants completed a 30-day seminar conducted in Spanish at the university, they spent 10 days in visiting schools on the mainland—in Washington, Boston, Philadelphia, New York, Charleston (W. Va.), and Allentown (Pa.).

Since the program began, in 1956, the workshops have provided an opportunity to 577 secondary and elementary school teachers and administrators from 20 Spanish-speaking South and Central American and Caribbean countries to study and observe U.S. education. Nine participants in the latest workshop were the first representatives of the Dominican Republic to take part in the program.

Though the workshops began as an annual project, since 1958 the Office has sponsored two a year. Beginning in February 1963 the Office will sponsor three workshops a year, but will limit each to 35 participants.

Survey of U.S. schools abroad

On the invitation of the Department of Defense a team of civilian specialists in education has made a survey of the elementary and secondary schools the Department maintains abroad for the children of its military and civilian personnel. From mid-September to mid-November the team visited selected schools and evaluated every aspect of their programs, from administration and curriculum to textbooks and teachers. It now will recommend to the Department any changes it thinks desirable.

Each branch of the military service administers its own schools: the Army has 138, the Navy 25, and the Air Force 92. Together they enroll approximately 180,000 children. Teachers, selected by each branch, must be U.S. citizens, have at least a bachelor's degree from an accredited college and at least 2 years' teaching experience in the States. (Still another group of schools for children of Americans overseas has support from the Department of State. See page 22 for a full article about these schools.)

Members of the survey team are Alva J. Gibson (chairman) of the North Central Association of Secondary Schools and Colleges, the organization that accredits overseas high schools meeting its standards; James E. Gibbs, Office of Education; Lynn M. Bartlett, State superintendent of public instruction, Michigan; Hazel Davis, National Education Association; Edward J. Meade, Jr., Ford Foundation; Waurine Walker, Texas Education Agency; and B. M. Zeff, Department of Defense. They visited, first, England, France, Germany, Italy, and Spain and then Hong Kong, Japan, Korea, Okinawa, the Philippines, and Taiwan.

War on illiteracy

The Office of Education is working with two national groups—the General Federation of Women's Clubs and the National Association of Public School Adult Educators—to help wipe out the blight of 8 million adult illiterates in the United States. The object of the effort is to ensure that public schools, colleges and universities, women's clubs, and national organizations in every community work as partners to eliminate adult illiteracy.

A beginning has been made with the production of "Operation Alphabet," a television (commercial and educational) series of 100 lessons that teaches adults how to read and write. The Philadelphia Public Schools produced and tested the films. In addition, the Federation will train thousands of carefully selected members to serve as educational assistants to find adult illiterates and to work with public schools systems in teaching them. NAPSAE has developed a home-study book for use with the television course, and the Adult Education Branch of the Office of Education has developed a manual for the use of every local chairman of education of the Federation.

Selected television stations are now showing "Operation Alphabet."

Community action for the elderly

Programs as close to home as possible are one object of the efforts of the Office of Education in the field of education for aging. To this end, and on a recommendation made by 12 educational leaders who studied the resolutions of the 1961 White House Conference on Aging at the request of the Office, the Office is encouraging the holding of regional and State conferences sponsored by nine national educational organizations. Regional conferences on education for aging have been held in seven regions of the Department of Health, Education, and Welfare. Seven States have held followup conferences on community planning of educational services for the elderly

and on the use of the talents and abilities of older persons in communication and educational services.

Specialists in many sections of the Office are cooperating with specialists in the Division of Continuing Education and Cultural Affairs in developing the program. Halbert Dunn, former head of the Office of Vital Statistics and now a member of the staff of the Adult Education Branch, is working with State groups in the development of community action programs. The Library of Congress, the Special Staff on Aging of the Department of Health, Education, and Welfare, and the Department of Labor are providing special services. The sponsoring organizations are the American Library Association; the American Association of School Administrators; the National Association of Retired Teachers; the Adult Education Association of the U.S.A.; the National Association of Public School Adult Educators; the American Association for Health, Physical Education and Recreation; Council of Chief State School Officers; the National University Extension Association; and the National School Boards Association.

Cooperative research program changes its review procedures

A new procedure for evaluating the project proposals submitted to the Office of Education for support under its Cooperative Research Program has recently been adopted. The change has been made on the recommendation of a committee of three appointed early last summer to review the evaluation procedures of the program: Eric F. Gardner, professor of education, Syracuse University; Francis Keppel, dean, Graduate School of Education, Harvard University; and Ralph W. Tyler, director, Center for Advanced Study of the Behavioral Sciences, Stanford University.

In essence the change is partly an increase in the number of reviewers, partly a division of labor. Four study panels have been established to relieve the Research Advisory Council (formerly called the Advisory Committee) of the work of technically evaluating the proposed projects—work which has grown in both amount and diversity beyond the convenience of one committee. Each panel has been assigned to one of four areas of educational research: Content, i.e., curriculum and instruction, (2) learners, i.e., personnel and processes, (3) environment, and (4) Project English.

The panels have already been named; they met for the first time in October, to evaluate the projects submitted to the Council in November. Each panel consists of five persons: Two are members of the Council, one of whom is chairman of the panel; three are leaders in education whose training and experience recommend them for that particular panel. A member of the Office of Education staff in the Cooperative Research Program is the executive secretary. The full register is as follows (Eric Gardner, chairman of the Council, is an ex officio member of each panel):

Content: Julian Stanley (chairman) and Samuel M. Brownell from the Council; J. Stanley Ahmann, chairman, department of psychology, Colorado State University; Evelyn Carlson, director of curriculum, Chicago Public Schools; and Patrick Suppes, professor of philosophy, Stanford University. William Carriker, executive secretary.

Learners: J. Lloyd Trump (chairman) and Thomas R. McConnell from the Council; Frances Ilg, professor of child development, Yale University; Royal B. Embree, associate professor of education, University of Texas; Kathryn C. Blake, assistant professor of education, University of Georgia. Robert H. Beezer, executive secretary.

Environment: James Jarrett (chairman) and G. Franklin Edwards, from the Council; Orville G. Brim, sociologist, Russell Sage Foundation; Roald Campbell, professor of educational administration, University of Chicago; and Anthony F. C. Wallace, chairman, department of anthropology, University of Pennsylvania. Alice Y. Scates, executive secretary.

Project English: David Krathwohl (chairman) and Donald Durrell from the Council; Theodore Clymer, professor of education, University of Minnesota; Robert C. Pooley, professor of English, University of Wisconsin; and John H. Fisher, professor of English, New York University. Gerald L. Smith, executive secretary.

6,000 teachers and counselors at summer institutes in 1962

During the summer of 1962 U.S. colleges and universities enrolled 6,327 persons in NDEA institutes: 4,368 elementary and secondary teachers of modern foreign languages attended 80 language institutes, and 1,959 secondary guidance counselors attended 66 guidance and counseling institutes. Seven of the language institutes were conducted overseas: One each in Argentina, Ecuador, Mexico, the Soviet Union, and West Germany and two in France.

Language awards for 1963–64

Competition for the 1963–64 awards under the NDEA language development program (Title VI) is now open to college students interested in studying one of the modern foreign languages not commonly taught in U.S. colleges. The $3.5 million set aside for the program will provide 900 fellowships, 100 awards to undergraduates in advanced study, and 40 postdoctoral awards.

Students interested should apply now directly to institutions offering qualifying programs. Institutions must submit applications, along with their recommendations on selection, to the Office of Education by February 8, 1963.

Travel awards for language study

Approximately 100 foreign travel awards have been made available to NDEA graduate fellows of language and area studies and to faculty members of NDEA language and area centers for travel and research abroad. The travel awards were made available in the fall of 1962 under joint arrangements of the Department of State and the Office of Education.

Directory of area programs shows more language studies

The new directory of college and university programs for training specialists in various foreign areas and cultures says that more and more of these programs are including training in the *languages* of the areas. It lists 136 programs in 62 institutions. Forty of these programs are new since the last directory was published, in 1959, and many of the others have been expanded; the growth has been helped along by Federal support under title VI of the National Defense Education Act.

The directory was published this fall by the Department of State, with the help of funds received under a contract with the Office of Education.

Cost and waste in college applications

Every year we have more high school graduates than college applicants, more applications than applicants, more "admittants" than "registrants," and more registrants than graduates. These facts are well known, but the costs of this series of reductions, in time, money, and human resources, are not well known nor has the waste resulting from multiple applications been estimated. Now the Office has information from publicly controlled and privately controlled colleges that gives us a general idea of the problems.

- Of the nearly 50,000 applications for admission to 20 colleges (10 publicly controlled and 10 privately controlled) in the fall of 1956, approximately 30,500 were approved for admission, but only 21,700 of those approved registered in these institutions; of the 52,000 applications in 1957, nearly 33,000 were approved, but only 22,585 registered in the institutions.

- In both years the private colleges admitted a smaller percentage of applicants (44.3 percent in 1956 and 45.3 percent in 1957) but enrolled about the same percentage of those admitted as public colleges (66.8 percent in 1956 and 68.8 percent in 1957). The public colleges admitted 74.6 percent of their applicants in 1956 and 76.8 percent in 1957 and registered 73.6 percent of them in 1956 and 68.4 percent in 1957.

- On the average these 20 institutions enrolled 436 students per 1,000 applications in 1956 and 435 per 1,000 applications in 1957.

- The "no-shows"—students who were admitted but did not register—filed a mean of 3.16 applications each in 1956 and 3.24 in 1957. No-shows in public colleges filed a mean of 2.68 in 1956 and 2.89 in 1957; those in private colleges, 3.61 in 1956 and 3.69 in 1957. Some no-shows filed applications in as many as 10 colleges.

- Nonrefundable application fees paid ranged from nothing to $150. In the 2-year period 61 percent of the no-shows paid one or more nonrefundable applications fees, averaging $22.80 in 1956 and $24.15 in 1957.

Local studies show that there has been little change since this study was made: multiple applications are still resulting in financial waste to students, secondary schools, and colleges; talent is still being lost.

These figures are from a study now in preparation—*College Applicants, Entrants, and Dropouts*, by Robert E. Iffert, coordinator for higher education research, and Betty S. Clark, research assistant. The study was conducted under an Office of Education Cooperative Research grant that was allocated to the 20 participating institutions. Data from 20 institutions obviously cannot reflect the national picture; nevertheless they are important for they deal with problems that are plaguing many institutions in the country.

OECD studies investment in agricultural education

Henry S. Brunner, OE specialist in agricultural education, Division of Higher Education, represented the United States in the Paris meeting of the Organization for Economic Cooperation and Development, November 12–16. The general purpose of the meeting was to report on studies of the "Orientation of Higher Education in Agriculture Within the Context of Intellectual Investments for Economic Growth and Development." The studies covered such subjects as the cost of education in agriculture in terms of the time a student spends in it and his potential production during that time as compared to his increase in productivity after he completes his education.

To OECD member countries interested in aiding newly developing countries the studies are not academic. In these countries investment in education must be as profitable as investment in highways or other social and economic development.

In preparation for the meeting Professor L. Malassis, École National Supérieure Agronomique, Rennes, France, had made a study of the gross national product that goes into agricultural education in each of the member countries and the proportion that each could spend on education in terms of its development of intellectual potential.

Dr. Brunner presented a critique of Professor Malassis' study and afterward led the discussion of it.

Research on education in the arts

The Cooperative Research Program of the Office of Education is now accepting proposals for research on education in the performing and nonperforming arts at all levels of education. Proposals may include the educational activities of such institutions as museums.

Although cooperative research projects already completed or now in process are in many fields of education, there have been very few projects on education in the arts.

Proposals for cooperative research projects should be submitted to the Director, Cooperative Research Program, Office of Education, Washington 25, D.C.

U.S. educators abroad

One of the latest to join the ranks of U.S. educators abroad as consultants to foreign governments is Edmund A. Ford, who for the past 4 years has been OE's specialist for organization and administration of secondary schools. He goes to Nigeria, where for 2 years he will be the teacher education consultant to the Federal ministry of education.

Nigeria, like virtually every other developing nation, is eager to improve its educational system and has not hesitated to seek help outside its borders. It now has, in addition to an educational aid team employed by the State Department's Agency for International Development (the team Dr. Ford will join), five other teams from the United States, each from one of these universities—the University of California at Los Angeles, Harvard University, Ohio University, Michigan State University, and Indiana University. Part of Dr. Ford's work will be to coordinate, for the benefit of teacher education, the work of all the teams in the country.

The Agency for International Development, under whose auspices the Federal Government supports educational missions abroad, has approximately 300 persons working in educational positions in aid programs overseas. Just in the past few years 30 members of OE's professional staff have gone abroad, either for AID or under other arrangements, to give some educational service in another country.

Panel reports on vocational education

A $400-million program of Federal aid to vocational and technical education has been proposed to President Kennedy by a panel of 25 consultants. At the President's request Secretary Ribicoff appointed the panel in October 1961 to review the national vocational education acts and to recommend improvements (see *School Life*, November-December, 1961, p. 24).

The panel has summarized the findings on which it based its recommendations in *Education for a Changing World of Work* (Office of Education Pub. No. 80020). The full report will be issued early in 1963.

Home economics seminar at Iowa

Twenty-one PH.D's associated with research in home economics education sat at the feet of two masters during a seminar at Iowa State University, October 22 to November 2. They had come from 17 States to profit from the long experience of Hester Chadderdon, professor of home economics education at the university, and Mattie Pattison, formerly at the university and now a member of the Home Economics Education Branch of the Office. The Office was a joint sponsor of the seminar.

Cultural Center Week

The people of the United States have had a special opportunity to support the National Cultural Center in Washington, D.C. President Kennedy proclaimed the week of November 26–December 2 as National Cultural Center Week and asked "all persons, organizations, and governmental agencies involved in fostering the performing arts in this Nation to publicize and observe that week." The President also urged State and local officials to support the celebration.

A special event of the Week was a closed-circuit television program shown in 60 cities which featured outstanding musicians, performers, and artists, such as Leonard Bernstein, Marian Anderson, Abe Burrows, Pablo Casals, Van Cliburn, and Benny Goodman. Proceeds from the sale of tickets for the program are being shared equally by the Center and local cultural projects. Half of the funds raised in Richmond, Va., for instance, will help support the Virginia Museum of Fine Arts.

Mrs. John F. Kennedy and Mrs. Dwight D. Eisenhower are honorary cochairmen of the

Center. Government, business, labor, and the arts are represented on the board of trustees.

In 1958 the Congress of the United States gave a tract of land in Washington, D.C., to the Nation for a National Cultural Center, but stipulated that funds to build and support the Center must come from the public. Plans for a building have been drawn up by Edward Durrell Stone.

Contributions for the Center should be sent to the National Cultural Center, 718 Jackson Place, N.W., Washington 6, D.C.

NASA grants to universities

The National Aeronautics and Space Administration has awarded grants totaling $6.4 million to five universities to provide research facilities for interdisciplinary programs in space-related sciences and technology. Recipients of the grants, the first NASA has awarded for this purpose, are the University of California-Berkeley, the University of Chicago, Rensselaer Polytechnic Institute, the State University of Iowa, and Stanford University.

The grant to the University of California will enable the institution to expand work in space science and technology. The University of Chicago will use its grant to build laboratory facilities for experiments in space as an extension of work it is doing on solar flares, cosmic ray activity, geomagnetic storms, data processing, lunar surface studies, and other scientific experimentation. Rensselaer will build a materials research laboratory to increase the interdisciplinary research it has been conducting for NASA. Iowa's grant will support a research laboratory for space sciences in its new physics building. Under the direction of James A. Van Allen—the discoverer of the Van Allen radiation belts—the university has already made significant contributions in basic research in physics as related to space sciences. Stanford's grant is for expansion of its biomedical instrumentation facilities where its work for NASA in the exobiology research program is conducted.

Higher education stamp

The Post Office Department has issued a 4-cent postage stamp honoring higher education as part of the centennial observance of the signing of the law that created land-grant colleges and universities. The stamp went on sale on November 14 in Washington, D.C., in conjunction with a dinner meeting marking the 100th anniversary of the Association of State Universities and Land-Grant Colleges.

The Land-Grant Act, known as the Morrill Act for the Senator who sponsored the bill, was signed into law on July 2, 1862, by President Lincoln. Under the terms of the act, Congress prorated land grants so that each State received 30,000 acres for each senator and representative serving it. Funds from the sales of these lands were invested, and the interest from the investment has been used to support colleges. There are 68 land-grant colleges in 50 States and Puerto Rico.

"Prenatal Care" reissued

The new edition of *Prenatal Care,* a publication of the Children's Bureau, stresses the point that having a baby is a family affair and that every member of the family—brothers and sisters and grandparents—contribute to the baby's development as an individual. It points out that we have more knowledge than ever before on pregnancy, childbirth, and infant care and that what we know makes having a baby safer. It also points out that parents have many more resources to turn to. It gives the expectant mother advice on food, health, clothing, and personal hygiene, and describes what she will need to know about her new baby.

"Prenatal Care" was first issued in 1913. The present edition is its second revision; the first was in 1949. It is No. 2 on the Government's best-seller list (No. 1 is *Infant Care*); over 6½ million copies have been sold.

Copies of the bulletin are available from the Government Printing Office, Washington 25, D.C., for 20 cents each.

Air Force career material

Young men and women interested in careers in the Air Force will find that there are many opportunities for them in this branch of the service. Careers are open both to officers and to enlisted men and women. To help teachers and counselors explain its program, the Air Force has prepared both printed material and films. The publications include these:

On the airman program—
Airman Career and Training Opportunities
Pocket Guide to Air Force Opportunities
Occupational Handbook
Parents' Guide to Their Son's Air Force Life

On aviation cadet and officer training—
Navigator Training Fact Sheet
Training of an Air Force Navigator
USAF Academy Fact Sheet
Officer Training School Fact Sheet

On the WAF (Women in the Air Force)—
Women in the Air Force
Horizons Unlimited
Women of Executive Ability
Opportunities Unlimited.

Publications are available from Headquarters, USAF Recruiting Service, Attn: Director of Advertising & Publicity, Wright-Patterson Air Force Base, Ohio.

Films on the airman program, aviation cadet program, and the USAF Academy program are available from local recruiting offices.

LUMSDAINE—*from p. 17*

effectiveness of the program based on data from students' performances on pre- and post-program criterion tests. These tests should exemplify what the producer expects the student to learn as a result of using the program. The manual should indicate how the student group was selected, how many students completed the program, their average level of performance on the test, and the dispersion or "scatter" of test scores. Information about how well students retained what they learned and how likely they were to use the program on a voluntary basis would also be valuable.

To evaluate fully the information in the manual (as would be desirable for the school district official or other purchaser who buys programs in considerable quantity) will generally require advice from a technical consultant who has professional training and competence in testing and measurement as well as in statistics and experimental design. For the benefit of the individual buyer or buyer of small quantities, a digest of the information in the manual might well be presented as a brief preface or "label" attached to individual copies of a program.

A school district contemplating using a program may be interested in the effects of the program on student performance other than those tested by the program producer. Potential users are advised, when possible, to evaluate a program by their own field tests, guided by technical consultation, before adopting a program for wide use.

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Economics of Higher Education.
Edited by Selma J. Mushkin, 1962, 406 pp., $1.50 (OE–50027).

Education and the Development of Human Technology.
By Kenneth L. Neff, 1962, 34 pp., 20 cents (OE–10018).

Financial Management of Federal-State Education Programs.
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